PB88-242524

Procurement under Superfund Remedial Cooperative Agreements

Booz-Allen and Hamilton, Inc., Bethesda, MD

Prepared for

Environmental Protection Agency, Washington, DC

Jun 88

U.S. Department of Commerce
National Technical Information Service
NTIS

PB88-242524

PROCUREMENT UNDER
SUPERFUND REMEDIAL COOPERATIVE AGREEMENTS

OSWER Directive 9375.1-11

June 1988

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Hazardous Site Control Division
Washington, D. C. 20460

REPRODUCED BY
U.S. DEPARTMENT OF COMMERCE
NATIONAL TECHNICAL
INFORMATION SERVICE
SPRINGFIELD, VA 22161

NOTICE

Development of this document was funded, wholly or in part, by the United States Environmental Protection Agency under contract No. 68-01-7376 to Booze, Allen & Hamilton. It has been subjected to the Agency's review process and approved for publication as an EPA document.

50272-101

REPORT DOCUMENTATION PAGE

1. REPORT NO. OSWER Directive 9375.1-11

2.

3. Recipient's Accession No. PB88 242524/AS

4. Title and Subtitle
Procurement under S/F Remedial Cooperative Agreements

5. Report Date June 1988

6.

7. Author(s)
U.S. EPA, Office of Emergency and Remedial Response

8. Performing Organization Rept. No.

9. Performing Organization Name and Address

Booz, Allen & Hamilton Inc.
4330 East West Highway
Bethesda, MD 20814-4455

10. Project/Task/Work Unit No. 09075-088-134

11. Contract(C) or Grant(G) No.
(C) 68-01-7376
(G)

12. Sponsoring Organization Name and Address

Office of Emergency and Remedial Response
U.S. EPA
401 M Street, SW
Washington, D.C. 20460

13. Type of Report & Period Covered
Directive, June 88

14.

15. Supplementary Notes

Updates Volume II of State Participation in the Superfund Remedial Program (PB84208784)

16. Abstract (Limit: 200 words)

This document, Procurement Under Superfund Remedial Cooperative Agreements, provides guidance for States; political subdivisions, thereof; and Indian Tribes on procuring services and construction during remedial response activities under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) or Superfund, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). Specifically,the document addresses current program requirements and regulations with which these entities must comply, as published in 40 CFR Part 30, General Regulations Under Assistance Agreements; 40 CFR Part 33, Procurement Under Assistance Agreements; and 40 CFR Part 300, the National Oil and Hazardous Substances Pollution Contingency Plan.

There are four main objectives of this document. These are: to summarize the requirements of 40 CFR Parts 30 and 33, EPA's regulations governing assistance agreements and procurement under assistance agreements; to outline the process that is used to procure a construction firm, and provide guidance on contents of bid documents and other requirements; to explain the requirements for retaining architectural and engineering firms and the various services they may provide during remedial response; and to highlight procedures for subagreement management and administration. Appendix E of the manual references EPA Superfund guidance documents on these topics.

17. Document Analysis a. Descriptors

Cooperative Agreements	Claims
States	Change Orders
Remedial Response	Awards
Reporting Requirements	

b. Identifiers/Open-Ended Terms

Procurement	State Roles	Engineering Services	Bids
Procurement Regulations	Architectural	Cost	
Subagreements	Contracts	Superfund	

Minority Businesses, Women's, Small Labor Surplus Area Businesses

c. COSATI Field/Group

18. Availability Statement
Release
UNLIMITED

19. Security Class (This Report) UNCLASSIFIED

20. Security Class (This Page) UNCLASSIFIED

21. No. of Pages 140

22. Price ----

(See ANSI-Z39.18) See Instructions on Reverse

OPTIONAL FORM 272 (4-77)
(Formerly NTIS-35)
Department of Commerce

FOREWORD

This document, Procurement Under Superfund Remedial Cooperative Agreements, provides guidance on procuring services during remedial response activities under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), or Superfund, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). Specifically, it addresses the program requirements that must be met to comply with current regulations as published in 40 CFR Part 30, General Regulation Under Assistance Agreements; 40 CFR Part 300, the National Oil and Hazardous Substances Pollution Contingency Plan.

This document was originally presented as Volume II of the State Participation in the Superfund Program manual, U.S. Environmental Protection Agency, March 1986, OSWER Directive Number 9375.1-5. This document has been updated to reflect the changes brought about by CERCLA, as amended, and to address the need for additional guidance due to increased State involvement in the Superfund program. Revisions to this manual are minimal except for three new appendices, which describe: the two-step formal advertising process; minority business reporting requirements under Superfund; and architectural/engineering firm retention for follow-on remedial response activities. This manual may be revised again in response to additional modifications to EPA assistance regulations in the future.

The topics covered in this guidance include procurement requirements; procurement of engineering services, including types of services provided; procurement of construction contractors; and subagreement administration. Clarification on this guidance can be obtained from Regional EPA offices. Additional assistance on these topics may be obtained from the Superfund guidance documents referenced in Appendix E of this manual.

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LIST OF ACRONYMS AND ABBREVIATIONS

A number of acronyms and abbreviations are used throughout the text; each is identified in the text, where possible. To assist the reader in understanding any acronym or abbreviation that may not be explained, and to provide a quick reference, a list of acronyms and abbreviations is included here.

AA	Assistant Administrator
A/E	Architectural/Engineering
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (PL 96-510)
CFR	Code of Federal Regulations
COE	U.S. Army Corps of Engineers
EPA	Environmental Protection Agency
FS	Feasibility Study
FY	Fiscal Year
GAD	Grants Administration Division
IFB	Invitation for Bids
MBE	Minority Business Enterprise
NCP	National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300)
NIOSH	National Institute for Occupational Safety and Health
NPL	National Priorities List
OERR	Office of Emergency and Remedial Response
OGC	Office of General Counsel
O&M	Operation and Maintenance
OMB	Office of Management and Budget
ORC	Office of Regional Counsel
OSDBU	Office of Small and Disadvantaged Business Utilization

OSHA	Occupational Safety and Health Administration
OSWER	Office of Solid Waste and Emergency Response
QAPP	Quality Assurance Program Plan
RA	Remedial Action *or* Regional Administrator
RD	Remedial Design
RFP	Request for Proposals
RFQ	Request for Qualifications
RI	Remedial Investigation
ROD	Record of Decision
RPM	Remedial Project Manager
SAP	Sampling Analysis Plan
SARA	Superfund Amendments and Reauthorization Act of 1986 (P.L. 99-499)
SBE	Small Business Enterprise
SCAP	Superfund Comprehensive Accomplishments Plan
SOQ	Statement of Qualifications
SOW	Statement of Work
USCG	United States Coast Guard
WBE	Women's Business Enterprise

I. INTRODUCTION

Section 104(d)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), or Superfund, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), authorizes the Environmental Protection Agency (EPA) to allow a State, political subdivision thereof, or Indian Tribe,* to conduct remedial response at a hazardous waste site. When a State elects to manage a remedial response at a site, it enters into a Cooperative Agreement with EPA. A Superfund Cooperative Agreement award is the assistance vehicle that transfers funds for response to the State and documents both EPA and State responsibilities for the project.

When a Cooperative Agreement is awarded, the recipient agrees to oversee the project, to ensure that the general assistance and Superfund program provisions of the agreement are met, and to manage the remedial funds. All Superfund Cooperative Agreements require recipients to comply with the provisions of 40 CFR Part 33, Procurement Under Assistance Agreements, as well as other general and specific program provisions. This manual presents guidance on this particular general assistance regulation and its relationship to State-managed Superfund remedial response activities.

A. SUPERFUND PROCUREMENT CONCERNS

Even if recipients fully satisfy EPA's procurement requirements, problems may arise that can seriously complicate or delay remedial response. Bid protests, change orders, and claims are three major areas of concern in the State Superfund remedial program.

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*The term "State," as defined in the revised National Contingency Plan (NCP), includes Indian tribes meeting certain requirements who wish to be treated as States with respect to certain provisions of CERCLA. Although the term "State" is used throughout this document, procedures in this guidance for procurement also are applicable to political subdivisions and to Indian Tribes that have entered into remedial Cooperative Agreements with EPA. Separate guidance on Cooperative Agreements with political subdivisions and Indian Tribes is contained in the State Participation in the Superfund Program manual.

Bid protests are written complaints filed by a party or parties with a direct financial interest affected by a State's procurement action. Change orders are written orders issued by the State (or its designated agent) to the State's contractor, authorizing an addition to, deletion from, or revision of a subagreement, usually initiated at the contractor's request. Claims consist of requests for changes submitted by the State's contractor (e.g., additional time and/or costs) which initially have been rejected by the State.

Bid protests, change orders, and claims are actually a series of problems that can occur at various stages in the procurement process. EPA, therefore, recommends that States institute a coordinated program that addresses these issues at the points at which they are likely to occur. Further, EPA will offer States assistance in this effort during remedial response; this will entail the following:

- Prevention of Bid Protests: States should conduct a biddability/constructability review before a construction contractor is procured. The State may choose to conduct this review itself, may procure the services of an independent third party, or may request that EPA perform the review. If EPA agrees to perform a biddability/constructability review, it will obtain the services of the U.S. Army Corps of Engineers (COE).* EPA reserves the right to perform this review, regardless of the option selected by the State, when the Agency considers the remedial action project to be highly complex or when there are overriding scheduling concerns.

- Management of Change Orders: The Cooperative Agreement funding remedial construction usually will include a construction contingency fund. States may not approve a change order that exceeds 20 percent of the contingency fund, nor may they approve a change when the aggregate of change orders exceeds 75 percent of the entire contingency fund. To do so, they first must obtain EPA approval, which is dependent upon State performance of administrative and technical reviews. These reviews will ascertain the effect that the change order(s) has on the project scope and the availability of funds to complete the response in the event that the change is initiated. When a remedial response is highly complex or when there are overriding scheduling concerns, EPA will provide the State with technical assistance in change order management through the COE or will supply funds to the State to secure the services of an independent construction management firm.

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*The Agency may also utilize services of other Federal agencies in lieu of the U.S. Army Corps of Engineers, as needed.

- Claims: EPA shares in the costs associated with claims at the same percentage rate used for the remedial action (i.e., 90/10 or at least 50/50). Before the Agency will consider funding these costs, however, EPA requires the State to conduct an administrative and technical review of each claim.

The following chapters of this manual provide more detailed information on these subjects.

B. ORGANIZATION OF THIS MANUAL

This manual, Procurement Under Superfund Remedial Cooperative Agreements, contains six chapters and supplementary appendices. It is organized as follows:

- Chapter I - Introduction, which explains the rationale for the organization of this manual and outlines EPA policies designed to assist States in the prevention and/or resolution of certain cost and scheduling issues

- Chapter II - Regulatory Requirements, which summarizes the requirements of 40 CFR Parts 30 and 33, EPA's regulations governing assistance agreements and procurement under assistance agreements, and outlines Federal and State roles

- Chapter III - Procurement of Engineering Services, which explains procurement of architectural and engineering (A/E) services

- Chapter IV - Engineering Services During Remedial Response, which contains a detailed explanation of the types of services an A/E firm can provide during all phases of remedial response

- Chapter V - Procurement of Construction Contractors, which outlines the process that is used to procure a construction firm and provides guidance on contents of bid documents and other requirements

- Chapter VI - Subagreement Administration, which highlights management and administration techniques for implementation and monitoring of work, distinguishes between change orders and claims, and provides detailed procedures for administering them.

Appendices to this manual contain further discusion on selected topics pertaining to procurement, and are organized as follows:

- Appendix A - Two-Step Formal Advertising, which describes the appropriate uses and procedures for using the two-step method for procurement of construction subagreements, as an alternative to traditional formal advertising.

- Appendix B - Reporting of Minority Business Under Superfund Activities, which details the reporting requirements of State agencies receiving Superfund monies regarding the use of minority contractors and efforts made to encourage participation of minority firms in the Superfund program.

- Appendix C - Class Deviation from 40 CFR Part 33, which summarizes the approved deviation from public notice (Part 33.510) and evaluation procedures (Part 33.515) requirements for recipients of Superfund Cooperative Agreements who wish to use the same A/E firm that provided services during the remedial investigation (RI)/feasibiity study (FS) phase to perform follow-on activities.

- Appendix D - Glossary of Terms, which provides a brief explanation of key terms used in this document.

- Appendix E - References, which are grouped according to the following activities: Procurement-General; Procurement of Architectural/Engineering Services; Preparation of Contract Documents; Contract Law; Insurance and Bonds; Negotiation/Economic Decision-Making; Construction Management; Change Orders; Claims; and EPA Office of Emergency and Remedial Response Guidance.

This organization of the subject matter is intended to provide as much background information on procurement as possible before discussing actual procurement of A/E and construction firms and subsequent potential complications with the process.

* * * * *

With the increasing number of remedial actions and the concomitant award of more subagreements by States, States must practice good procurement procedures and management to minimize the costs of remedial response and to meet cleanup schedules. EPA's requirements are intended to promote competition, and to ensure that all work is performed properly, that only reasonable and necessary costs are incurred, and that work performed complies with contractual and regulatory requirements. This manual outlines EPA procurement requirements as they relate to the Superfund program. The following chapter provides general information on EPA procurement requirements.

II. PROCUREMENT REQUIREMENTS

This chapter briefly outlines the salient points of EPA's regulations that apply to all procurement under Superfund Cooperative Agreements: 40 CFR Part 300, the National Oil and Hazardous Substances Pollution Contingency Plan; 40 CFR Part 30, EPA's General Regulation for Assistance Programs; and 40 CFR Part 33, Procurement Under Assistance Agreements.* The chapter also addresses specific procurement topics:

- Federal and State roles in procurement
- Procurement system certification
- Methods available for procuring assistance
- Methods for promoting competition
- Types of subagreements
- Minority, women's, small, and labor surplus area businesses
- Document retention requirements for subagreements
- Conflicts of interest and code of conduct
- Avoidance of unfair labor practices
- Cost and price analysis
- Profit analysis.

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* States may elect to have EPA conduct response activities at a site. Under Federal-lead response agreements, EPA requires States to pay cash to meet their cost-sharing obligations for remedial activities under a Superfund State Contract. If a State elects to contribute services as part of its cost-sharing obligation at a Federal-lead site, they must first enter into a Cooperative Agreement with EPA. If a State exercises this option, it must comply with the provisions of 40 CFR Parts 30 and 33.

These are addressed in the following sections and apply to procurement of both engineering services and construction contractors.

A. REGULATIONS APPLICABLE TO PROCUREMENT

A State must meet the requirements of several EPA regulations when implementing an executed Superfund Cooperative Agreement. These include the following:

- National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR Part 300),
- General Regulation for Assistance Programs (40 CFR Part 30)
- Procurement Under Assistance Agreements (40 CFR Part 33).

In addition, specific provisions of other regulations, as they affect those cited above, apply (e.g., 40 CFR Part 32, Debarment and Suspension). The State also must consider the applicability of other State and Federal environmental and public health statutes, depending on conditions at the site and the cleanup approach to be taken.

Procurement Under Assistance Agreements, 40 CFR Part 33, is EPA's regulation governing procurement of supplies, services, and construction by assistance recipients, and, therefore, applies to States entering into Superfund Cooperative Agreements with EPA. Key points of this regulation are summarized in Exhibit II-1 on the following page. Under this regulation, a State may use its own procurement policies and procedures when conducting procurements using EPA funds if the State first certifies that its system fulfills the intent of 40 CFR Part 33. If the State's procurement policies and procedures do not meet all EPA requirements, the State must use the procedures set forth in the regulation, must follow the requirements in 40 CFR Part 33, Appendix A, and must allow EPA pre-award review of all proposed procurement actions that will use EPA funds.

B. FEDERAL AND STATE ROLES IN PROCUREMENT

As previously stated, a Superfund Cooperative Agreement is the mechanism used to document EPA and State responsibilities and assurances concerning a remedial response project. The provisions that are incorporated into Superfund Cooperative Agreements to delineate these responsibilities are discussed in the State Participation

EXHIBIT II-1
SUMMARY OF REQUIREMENTS FOR PROCUREMENT UNDER ASSISTANCE AGREEMENTS (40 CFR Part 33)

TITLE	SUMMARY OF REQUIREMENT	SECTION
Recipient Responsibility	System must ensure that contractors perform in accordance with all applicable requirements	33.210
Submission of Information	Recipient must inform Award Official of construction subagreements over $10,000 per year*	33.211
Limitation on Subagreement Award	System must consider listed factors in determining contractor responsibility	33.220
Competition	System must have procurement transaction procedures which provide maximum open and free competition	33.230
Profit	System procedures must allow only fair and reasonable profits to contractors	33.235
Small, Minority, Women's, and Labor Surplus Area Businesses	System should award a fair share of subagreements to such businesses by following the six affirmative steps specified	33.240
Documentation	System must require that procurement records and files for purchases over $10,000 include items* specified	33.250
Specifications	System procedures for establishing specifications must meet the requirements listed	33.255
Bonding and Insurance	System procurements must meet the specified requirements	33.265
Code of Conduct	System must have a written code or standard of conduct for State officials during subagreement award	33.270
Federal Cost Principles	System procedures for determining allowable costs must meet the specified principles	33.275
Prohibited Types of Subagreements	System may not allow cost-plus-percentage-of-cost (where multiplier includes profit) or percentage-of-construction-cost types of subagreements	33.285
Cost and Price Considerations	System procedures must allow for analysis of cost and price, as specified	33.290
Lower Tier Subagreements	System must require that prime contractors comply with all provisions specified	33.295
Small Purchase	System small purchase method must meet specified requirements	33.305-315
Formal Advertising	System procedures relating to formal advertising, including those for bid documents and subagreement awards, must meet the specified requirements	33.405-430
Competitive Negotiation	System procedures for competitive negotiation must meet the specified requirements	33.505-525
Noncompetitive Negotiation	System procedures for noncompetitive negotiation must meet the specified requirements	33.605
Requirements for Recipients of Remedial Action Cooperative Agreements Under CERCLA	Subpart requires use of formal advertising for remedial action construction procurements unless the Award Official determines that it is not appropriate (not applicable for remedial planning or for engineering services)	Subpart E
Subagreement Provisions	Subpart includes the clauses that must be contained in subagreements for procurement	Subpart F
Protests	Subpart describes procedures to request EPA review of a receipient's protest determination	Subpart G

Note: * The $10,000 limit for small purchases will be raised to $25,000 for Cooperative Agreements awarded on or after October 1, 1988, pursuant to 53 F.R. 8034 (March 11, 1988).

in the Superfund Program manual. EPA's role during implementation of the Agreement is one of oversight to ensure that the State complies with applicable statutes, regulations, and policies. The Agency also ensures that work conducted under the Cooperative Agreement meets the requirements for implementing any enforcement or cost recovery actions and that the State uses the obligated remedial funds for approved tasks.

The State is responsible for resolving all subagreement and administrative issues associated with procurements under the Cooperative Agreement, since EPA is not a party to any subagreements (40 CFR 33.245). The State may award subagreements under the Cooperative Agreement only to responsible contractors, as defined by 40 CFR 33.220, and the State must ensure that these contractors perform in accordance with all provisions of the subagreements (40 CFR 33.210(a) and (b)). In enforcing provisions of such subagreements, the State may request technical and legal assistance from EPA, but EPA is not responsible for enforcing subagreement provisions (40 CFR 33.210(g)).

EPA may offer States technical assistance and respond to requests from States for technical assistance related to the implementation of 40 CFR Part 33. EPA technical assistance for remedial response may include:

- Recommendations on qualified offers and acceptable proposals based on published evaluation criteria. EPA's technical assistance should not be used to evaluate price or contractor responsibility. Although EPA may use its own contractors to provide some types of technical assistance, any support related to procuring a State contractor must be provided by Federal employees, not EPA contractor staff.

- Recommendations, either directly or through the U.S. Army Corps of Engineers (COE), on bids for remedial action (RA) in accordance with the methods and criteria in the bidding documents. EPA's technical assistance should not, however, be used to determine contractor responsibility.

All work assignments that could result in a perception that the EPA contractors are either making or unduly influencing EPA recommendations or State decisions must be avoided. Contractor personnel must not be used to assist in reviewing technical proposals. This will avoid the perception that EPA contractors are influencing the selection of other contractors. Further, it avoids the problem of allowing EPA contractors the opportunity to review technical proposals submitted by their competitors.

EPA staff providing such technical assistance:

- Shall constitute a minority of the selection panel (limited to making recommendations on qualified offers and acceptable proposals based on published evaluation criteria) for the contractor selection process
- Must have fulfilled the training experience and workload limitation requirements in the EPA Contracts Management Manual
- Are not permitted to participate in the negotiation and award of subagreements
- Are not permitted to use EPA contracts to provide any support related to procuring a State contractor
- Can use the COE for review of State bidding documents, requests for proposals, and bids and proposals received.

In these ways, EPA staff ensure that the Agency's role remains one of oversight and assistance, but that States maintain responsibility for implementing activities under 40 CFR Part 33.

C. PROCUREMENT SYSTEM CERTIFICATION

States should develop their own procurement procedures and policies to satisfy the minimum requirements of 40 CFR Part 33, and to certify their procurement procedures to EPA in accordance with 40 CFR Part 33, Subpart A. If the State does not have a procurement system that meets the minimum requirements of 40 CFR Part 33, the State must follow the requirements in EPA's regulation and give the Agency the opportunity to review all proposed subagreements and associated procurement actions prior to subagreement award (40 CFR 33.110(b)(2)). States that provide certification will not receive this level of procurement oversight by EPA; however, EPA reserves the right to review any State procurement action funded wholly or in part by EPA. (Additional information on procurement system certification can be found in the State Participation in the Superfund Program manual.)

States are encouraged to seek advice from EPA at any stage of any procurement action. EPA staff members are experienced in the technical, legal, and administrative aspects of procurement under Superfund and can constitute an invaluable resource to States. States should consult with EPA legal staff members prior to awarding subagreements that any party may potentially construe as controversial and that eventually may result in a protest of the procurement action. This will mitigate the possibility of a successful bid protest being lodged.

EPA may review the award of subagreements procured under a Cooperative Agreement when States do not certify their procurement systems (40 CFR Part 33, Subpart A), and may exercise this authority for complex remedial activities even if a State is self-certified. In either case, EPA's oversight of a procurement action will include:

- A review of the State's award recommendation for adequate evidence of the selected engineer's or construction contractor's capability to perform the work properly
- A review of the State's compliance with guidelines for using minority (MBEs) and women's business enterprises (WBEs)
- Obtaining evidence from the State that the public solicitation process conforms with Federal, State, and local procurement regulations
- Obtaining evidence from the State that all solicitation and/or bidding disputes have been resolved, or obtaining details of any unresolved disputes.

If a State has not certified its procurement system, the State must submit the offer or the tabulation of bid results before awarding the subagreement. EPA may review both the bid tabulation and the State's selection procedures. EPA also may choose to exercise this authority for complex remedial activities when States are self-certified.

Even if a State certifies its procurement system, EPA retains the authority to perform any of the following activities:

- Receive all bids or offer tabulations after award and notify the EPA Award Official of all construction subagreement awards over $10,000* (40 CFR 33.211)
- Authorize and approve noncompetitive awards under 40 CFR 33.605(d)
- Authorize the use of innovative procurement methods (40 CFR 33.210(h))
- Approve the use of a procurement method other than formal advertising for Superfund remedial action construction awards (40 CFR 33.910)
- Resolve bid protest appeals (40 CFR 33, Subpart G).

EPA also reserves the right to review a State's certified procurement system or procurement actions under an assistance agreement. If EPA determines that the State is not following procurement procedures as certified, EPA will revoke the State's certification and will require it to follow the procedures of 40 CFR Part 33, including Appendix A; further, EPA may impose sanctions as detailed in 40 CFR Part 30, including termination of the Cooperative Agreement. States are cautioned to evaluate their procurement systems carefully prior to self-certification to ensure that they fully comply with 40 CFR Part 33.

A State must certify its system to EPA only once every two years unless the assistance agreement specifies a longer project period. If the State has previously provided its required certification, a responsible official must complete Part A of the Certification Form, EPA Form 5700-48, indicating the month and year in which this certification was submitted.

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* The $10,000 limit for small purchases will be raised to $25,000 for Cooperative Agreements awarded on or after October 1, 1988, pursuant to 53 F.R. 8034 (March 11, 1988).

D. METHODS OF PROCUREMENT

Under 40 CFR Part 33, States must award subagreements using the appropriate method from those outlined below:

- Formal advertising (40 CFR 33.405-33.430), which requires, at a minimum, that all of the following conditions be met:
    - A complete, adequate, and realistic specification or purchase description of what is required
    - Two or more responsible bidders who are willing and able to compete effectively for the recipient's business
    - A procurement that lends itself to the award of a fixed-price subagreement
    - The selection of the successful bidder be made principally on the basis of price (40 CFR 33.405(b)).
- Competitive negotiation, the requirements for which are defined in 40 CFR 33.505-33.525. This method may be used only if conditions are not appropriate for formal advertising. (Optional selection procedures for architectural and engineering (A/E) firms are described in 40 CFR 33.525.)
- Small purchase, which may be used only for procurement actions not exceeding $10,000, following procedures described in 40 CFR 33.305-33.315.
- Noncompetitive negotiation, the procedures for which are described in 40 CFR 33.605 and are used only if the other three procurement methods are inappropriate due to the specified reasons.

A State may use procurement methods or procedures other than those specified only if it first obtains written approval from the EPA Award Official. A State may not use a method other than formal advertising, however, to procure construction contractors during remedial action unless it has first obtained concurrence from the EPA Award Official. (This requirement does not apply to A/E services during remedial action.) Formal advertising cannot be waived in the Superfund remedial program on the basis of a claimed emergency situation, since EPA handles

Superfund emergencies under the removal rather than the remedial program. Furthermore, a declaration of an emergency under State law does not necessarily constitute an emergency under the EPA Superfund program's criteria.

When complete, adequate, and realistic specifications of what is required are not available, an alternate type of formal advertising may be used, called the two-step formal advertising method. The requirements for this method are described in Chapter V and in Appendix A.

A summary table of the primary procurement methods and procedures is presented in Exhibit II-2, on the following page.

E. TYPES OF SUBAGREEMENTS

There are several types of subagreements possible under EPA assistance awards. For the Superfund program, EPA regulations and procedures specify that some subagreement types are preferable in certain instances, while some are not allowed. This section outlines these subagreements and provides information on their use. In addition to following these guidelines, States must ensure that all subcontracts awarded by a contractor comply with 40 CFR 33.295, "Subagreements Awarded by a Contractor."

E.1 Fixed-Price Subagreements

Under a fixed-price (lump sum, unit price, or a combination of the two) subagreement, the State and its contractor agree upon a price for the supplies, services, or construction to be provided. This price, then, is fixed no matter what the final costs of the project are. The total cost to the State is changed only if a change order is negotiated.

A fixed-price subagreement is awarded in instances when a project scope of work can be defined precisely, such as in the procurement of construction contractors using bidding documents that include construction drawings and specifications. A fixed-price subagreement also may be negotiated for services whose scope can be defined clearly. For other than construction, however, this type of subagreement is used less frequently than the cost-plus-fixed-fee type (discussed below), primarily due to the difficulty inherent in defining the scope and limitations of the work to be performed under a cost-plus-fixed-fee subagreement. Where a fixed-price subagreement is found to be appropriate, it is the easiest type to administer.

EXHIBIT II-2

SUMMARY OF PROCUREMENT METHODS AND PROCEDURES

PROCUREMENT METHOD	EXAMPLES	PROCUREMENT PROCEDURES
Formal Advertising*	. Construction (Remedial Action)	. Advertise for Bids . Hold Pre-Bid Conference . Receive and Open Bids . Evaluate Bids . Issue Letter of Intent . Issue Notice of Award . Execute Subagreement . Issue Notice to Proceed (See Exhibit II/V-1 for Detailed Flow Chart of Procurement Procedures for Construction Services)
Competitive Negotiation	. Engineering Services for RI/FS and Design . Construction Management . Claims Management . Public Relations . Project Management . Operations Assistance . Biddability/Constructability Review	Basic Procedures . Issue Request for Proposals . Evaluate Proposals . Develop "Short List" of Best-Qualified Offerors with Acceptable Proposals in the Competitive Range . Conduct Interviews if Desired . Negotiate with All Offerors Within the Competitive Range . Execute Subagreement Optional Procedures for Engineering Services Only . Issue Request for Qualifications or Refer to Pre-Qualified List . Develop "Short List" of Best-Qualified Offerors . Ask for Proposals from the Best-Qualified Offerors . Evaluate Proposals . Negotiate with Offeror with Highest Ranked Proposal . Reach Agreement or Negotiate with Offeror of Next Highest Ranked Proposal . Execute Subagreement (See Exhibit II/III-1 for Detailed Flow Chart of Procurement for Engineering Services)
Small Purchase**	. Equipment/Materials/ Supplies under $10,000	. Obtain Price or Rate Quotations from an Adequate Number of Qualified Sources . Make Purchase
Noncompetitive Negotiation***	. Products or Services Available Only from a Single Source . Emergency**** . Inadequate Competition . Award Official Approves	. Determine Need and Document Reasons for Use and Get Award Official Approval, if Necessary . Negotiate with Single Firm or Individual . Execute Subagreement

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Note: *Only method for construction without concurrence of the EPA Award Official.
**The $10,000 limit for small purchases will be raised to $25,000 per 53 F.R. 8034 (March 11, 1988).
***Noncompetitive negotiation rarely is approved by EPA for use in the Superfund remedial program.
****Emergencies handled under removal program; Declaration of emergency under State law does not necessarily constitute an emergency under EPA Superfund.

E.2 Cost-Plus-Fixed-Fee Subagreements

The cost-plus-fixed-fee subagreement is the type most commonly used for obtaining services other than construction on Federally assisted projects. Cost-plus-fixed-fee subagreements most often are used when it is difficult to define accurately and clearly the scope and extent of the work to be performed.

With a cost-plus-fixed-fee subagreement, both a cost ceiling, made up of direct and indirect costs for the project, and a fixed contractor fee for the work are established. The State then pays only for the costs of the work performed, plus the fixed fee. For example, if the cost ceiling is negotiated at $200, ($100 direct costs and $100 indirect costs) and the fixed fee is $30, the State would pay $230 for the project. If the actual project costs are $80 direct costs and $80 indirect costs, however, the State would pay $190 for the project (actual direct and indirect costs plus the full fixed fee of $30).

On the other hand, if project costs are expected to exceed the agreed-upon ceiling, the contractor must so inform the State. The State either can complete the original subagreement after approving the increased cost ceiling, if increases are found to be justified, or can terminate the subagreement. For projects where costs are expected to exceed the ceiling, the contractor is not required to incur costs in excess of the ceiling, nor to complete the project as negotiated unless the State first negotiates and authorizes a new cost ceiling. The contractor does not receive an increased fee for projects where increased costs are for additional work within the original scope of services. If the additional work is beyond the scope of the original subagreement and the contractor is authorized to implement that work, the contractor may claim an additional fee.

E.3 Percentage-of-Construction-Cost Subagreements

Used many years ago, this type of subagreement established the price of a project as a percentage of the construction costs. It is not allowed when Federal funds are involved in a project.

E.4 Cost-Plus-Percentage-of-Cost Subagreements

This type of contract applies a multiplier, including a profit, to direct costs of a project to determine total costs. It is not acceptable when EPA funds are involved in a project.

E.5 Other Subagreement Types

Other types of subagreements exist. Some are acceptable for use on EPA-assisted activities, some are less desirable. States employing firms that have previously performed EPA-assisted work, particularly under the CERCLA program, should request assistance from their contractors in determining appropriate subagreement types; such firms should be familiar with acceptable forms of subagreements. States also may contact the EPA Regional office to answer questions concerning forms of subagreements.

F. PROMOTING COMPETITION

EPA procurement regulations prohibit the use of practices that unduly restrict or eliminate competition (40 CFR 33.230). Examples of practices that are considered unduly restrictive include:

- Noncompetitive practices between firms
- Organizational conflicts of interest
- Unnecessary experience and bonding requirements
- State or local laws, ordinances, regulations, or procedures that give local or in-State bidders or proposers preference over other bidders or proposers in evaluating bids or proposals
- Placing unreasonable requirements on firms in order for them to qualify to do business
- Unduly restrictive specifications as described by 40 CFR 33.255.

Under the Superfund program, States must take appropriate actions to promote competition. These include:

- Publishing solicitations in daily newspapers with significant (Statewide) circulation and in trade publications (e.g., Engineering News Record, Public Works Magazine, Consulting Engineer Magazine) with regional and national circulation
- Encouraging participation by MBEs, WBEs, and small and labor surplus area businesses by including qualified firms on solicitation lists and by regular notification of Federal, State, and local agencies that promote the interests of these businesses

- Providing adequate time between the date of the solicitation and the date on which proposals or bids will be accepted (for engineering services, this is usually four to six weeks; for construction projects, this is usually four to eight weeks, depending on the subagreement size and complexity)
- Developing, implementing, and publishing model codes of procurement to provide a consistent basis for obtaining A/E services and construction contractors
- Developing and publishing model codes of ethics to be honored by the State employees who are involved in the procurement process
- Developing accurate and complete requests for qualifications and/or proposals and bidding documents to be used in obtaining A/E services and construction contractors
- Refraining from noncompetitive (sole-source) procurement, except in instances where an item or service is available only from a single source, an emergency requires immediate action, competition is not adequate (see 40 CFR 33.605(c)), or EPA approval is granted
- Not using construction specifications which are proprietary, exclusionary, or discriminatory in nature
- Whenever possible, using performance specifications for equipment and materials based upon accepted, nationally known standards.

Additional actions States may take are maintaining lists of qualified offerors and bidders who may be sent direct solicitations to perform A/E services and construction, and providing trade associations, engineering organizations, plan reading rooms, etc., with copies of solicitations, requests for proposals, or other bidding information.

G. MINORITY, WOMEN'S, SMALL, AND LABOR SURPLUS AREA BUSINESSES

As specified in EPA's procurement regulation, States procuring services under EPA assistance agreements must take the following six affirmative steps to ensure that MBEs, WBEs, and small businesses are used whenever possible as sources of supplies, construction, and services (40 CFR 33.240):

- Place qualified MBEs, WBEs, and small businesses on solicitation lists
- Assure that MBEs, WBEs, and small businesses are solicited whenever they are potential sources
- Divide remedial response tasks into separate subagreements, when economically feasible, to permit maximum participation by MBEs, WBEs, and small businesses
- Establish delivery schedules, where the requirements of the work permit, that encourage competition by MBEs, WBEs, and small businesses
- Use the services and assistance of the Department of Labor, the Small Business Administration, and the Office of Minority Business Enterprise of the U.S. Department of Commerce
- Require prime contractors to take the above steps if they subcontract and to document that they have fulfilled these steps.

States are encouraged to engage labor surplus area businesses in Superfund work by using the steps outlined above and to advertise procurement actions in MBE, WBE, and small business publications. States also must maintain records on participation by MBEs, WBEs, and small businesses.

Further, for MBEs and WBEs, but not for small businesses, EPA requires all assistance recipients to report on their utilization of such firms by submitting Department of Commerce Standard Form 334, "MBE/WBE Utilization Under Federal Grants, Cooperative Agreements, and Other Financial Assistance" within one month after the end of each Federal fiscal quarter. This form must be submitted regardless of whether the recipient awards a subagreement during a particular Federal fiscal quarter. Recipients must comply with this reporting requirement after they award their first subagreement and until they and their contractors have awarded their last subagreement for the activities or tasks identified in the assistance agreement.

Section 105(f) of CERCLA, as amended, requires that EPA report annually to Congress on minority subagreements for response activities. Regions must collect these data using information obtained from assistance recipients for inclusion in the Annual Report on Superfund prepared for Congress. The Regional MBE/WBE coordinator can provide additional guidance on MBE/WBE reporting requirements. (See Appendix B for additional information on these requirements.)

Each EPA program is required to establish an annual "fair share" objective for MBE and WBE utilization. To this end, each Region is requested to negotiate a fair share agreement with each State within its jurisdiction. When a Superfund Cooperative Agreement is awarded to a State with which a "fair share" agreement has not been negotiated, the recipient must agree that it will not award any subagreements under the Superfund Cooperative Agreement until it has negotiated a fair share objective with EPA.

Generally, it is not necessary to negotiate an MBE/WBE fair share for each assistance agreement. When a dollar objective is agreed upon for a specific Superfund Cooperative Agreement, however, that dollar objective should be stated specifically in the MBE/WBE reporting provision of the Cooperative Agreement.

Additional details on utilizing MBEs and WBEs for Superfund State-lead remedial response, and a provision on the subject to incorporate into Superfund Cooperative Agreement applications, are found in the State Participation in the Superfund Program manual.

H. DOCUMENTATION

States must maintain detailed documentation on all procurement actions in accordance with relevant and applicable sections of 40 CFR Parts 30 and 33 and existing EPA guidance and administrative manuals. Such documentation includes:

- Basis for contractor screening and selection (40 CFR 33.250)
- Justification for the procurement method used (40 CFR 33.250)
- Justification for any specification or requirement that does not encourage free and open competition (40 CFR 33.250)
- Justification for the type of subagreement to be awarded (40 CFR 33.250)

- Evidence of advertising (40 CFR 33.250)
- Evidence of solicitation of small, minority, and disadvantaged business enterprises (40 CFR 33.240)
- Actual bids submitted (40 CFR 33.250)
- Basis of award, including a copy of the cost or price analysis and documentation of negotiations (40 CFR 33.250)
- Basis and justification for rejection of any or all bids (40 CFR 33.250)
- Bid tabulations (40 CFR 33.275)
- Payment files, including envelopes in which invoices were received (40 CFR 30.500(b))
- Thorough documentation of all project costs for possible cost recovery action (40 CFR 30.500); for multi-site Cooperative Agreements, costs need to be accounted for by site as well as by assistance agreement number, and by the following remedial activities:
    - Remedial investigation/feasibility study
    - Remedial design
    - Remedial action
    - Operation and maintenance
- Protest files (40 CFR Part 33, Subpart G)
- Contracting documents, including the subagreement, work orders, change orders, and related documentation
- Records pertaining to subcontractors used by the prime contractors (40 CFR 30.500(b))
- Correspondence
- Logs of telephone and personal conversations
- Minutes of meetings, including pre-bid conferences, bid openings, and consultant interviews
- Technical and financial progress reports (40 CFR 30.505)

- Records for claims, disputes, and noncompliance actions (40 CFR 30.500(b))
- Other technical documentation such as site visit reports and any other matters of consequence relevant to the project, its funding, design, or performance.

Specific details on document retention and regulatory references may be found in the State Participation in the Superfund Program manual. As a general policy, States should document in writing any other matters that have to do with procurement and should maintain such records for review during Federal audit. These records will enable the State to prove that all Federal and State requirements have been met in conducting the procurement action for the remedial response.

The State's contractors must maintain records pertinent to the project (40 CFR 30.500(b)), including:

- Bid records
- Subagreement documents
- Work orders received
- Change orders and supporting records
- Progress reports
- Payment vouchers
- Stop-work orders
- Claims and disputes, with complete back-up evidence.

The State's prime contractors also must maintain such records for all subcontractors used on the project.

I. CONFLICTS OF INTEREST AND CODE OF CONDUCT

States must conduct all procurement actions in a manner above reproach, with complete impartiality, and with preferential treatment to none. This means that no State employee may solicit or accept any gratuities, gifts, favors, loans, or anything of monetary value from anyone who has obtained, is obtaining, or may possibly seek to obtain subagreements from the State; from anyone who conducts activities that are regulated by the employee's State agency; or from anyone who has interests that may be substantially affected by the performance or nonperformance of the employee's duties. States must avoid conflicts in which a State employee has a share in, or in any manner may possibly benefit from, any subagreements under State administration.

In addition, States must take steps to avoid organizational conflicts of interest in Superfund procurement actions. An organizational conflict of interest exists when the nature of the work to be performed under a subagreement may result in an unfair competitive advantage to a contractor or may impair the contractor's objectivity in performing the work. Examples of organizational conflicts include the following:

- A contractor who provides engineering and/or other technical direction for a system, who determines the system's basic concept, and who supervises its execution by other contractors should not be in a position to favor his/her own products or capabilities
- A contractor who prepares specifications covering items to be used in a competitive acquisition should not be allowed to furnish these items, either as a prime contractor or as a subcontractor
- A contractor who gains access to proprietary information should agree to protect against unauthorized use or disclosure of the information and should refrain from using the information for any purpose other than that for which it is intended
- A contractor who obtains a subagreement to perform a remedial response action under which it would be paid to clean up a site for which it ultimately could be found liable for the original hazard
- A contractor who, when performing a remedial response action, discovers evidence establishing its own liability for the site.

The various steps that a State may take to ensure against such situations are described below.

EPA's policy is to prevent personal or organizational conflicts of interest or the appearance of such conflicts of interest in the award and administration of EPA assistance, including subagreements (40 CFR 30.613). To prevent this, EPA's procurement regulation requires that States maintain a written code or standard of conduct to govern the performance of its employees engaged in the award and/or administration of subagreements supported by Superfund (40 CFR 33.270). This code must provide that no State employee shall participate in the selection, award, or administration of a subagreement supported by Superfund if a real or apparent conflict of interest exists. Such a conflict would arise when any State employee, any member of a State employee's immediate family, or any partner of the employee, has a financial or other interest in the firm selected for the award; a conflict also would arise if an organization which may receive or has received a subagreement hires the State employee or any immediate family member or partner of the employee. While State employees may neither solicit nor accept gratuities, favors, nor anything of monetary value from contractors, States may set rules to determine situations where financial interest is not considered to be substantial or a gift is an unsolicited item of nominal intrinsic value.

At a minimum, States also must incorporate the following provisions, or their equivalents, into all subagreements awarded using Superfund monies (to be included in revisions to 40 CFR 33.1030):

- The contractor shall not provide data generated or otherwise obtained in the performance of his responsibilities under a subagreement to any party other than State or Federal agencies and their authorized agents.

- The contractor shall not accept employment from any party other than State or Federal agencies for work directly related to the site(s) covered under a subagreement for a period of three years from termination of the subagreement, or until any cost recovery action related to the site(s) is completed, whichever is longer, unless he has received a written release from this restriction from the contracting State agency, which includes an EPA concurrence.

- The contractor shall provide witnesses and documentation of activities performed and costs incurred under a subagreement upon request to State or Federal agencies during the period of three years from termination of the subagreement, or until any cost recovery action related to the site(s) is completed, whichever is longer. The contractor shall be entitled to fair and just compensation for any such activities performed.

- The contractor agrees to notify the contracting officer of any actual, apparent, or potential conflict of interest with regard to any individual working on a work assignment or having access to information regarding the subagreement. Notification of any conflict of

> interest shall include both organizational conflicts of interest and personal conflicts of interest (which are defined as the same types of relationships as organizational conflicts of interest, but applicable to an individual). In the event that a personal conflict of interest exists, the individual who is affected shall be disqualified from taking part in any way in the performance of the assigned work that created the conflict of interest situation.

Although States must require contractors to comply with these provisions at a minimum, States may choose to include additional or more stringent conflict-of-interest statements in their subagreements.

In some instances, construction contractors who are Potentially Responsible Parties (PRPs) at a site may have conflicts of interest that would prevent them from serving the best interest of the State and/or the Federal government. To protect the interests of the State and Federal governments under such circumstances, the State must include appropriate language in the bid solicitation requiring potential contractors to provide information on their status, and that of their parent companies, affiliates, and subcontractors as PRPs at the site. The potential contractors must be required to certify that they have disclosed such information or that no such information exists, and that any such information discovered after submission of their bids, proposals or the contract award will be disclosed immediately.

Prior to contract award, the State must evaluate information provided by the potential contractor and subcontractors and determine that they do not have conflicts of interest, which in the EPA's opinion might impair their performance. In the event that a member of the low bidder contract team might have such a conflict, the bid may be declared nonresponsible in accordance with appropriate acquisition regulations and the contract awarded to the next eligible low bidder.

J. UNFAIR LABOR PRACTICES

Unfair labor practices are illegal and prohibited under Superfund. Examples of unfair labor practices include kickbacks from subagreement award and antitrust violations.

Kickbacks are payments made to influence the award of subagreements. The principal deterrent to kickbacks is the Anti-Kickback Act (41 U.S.C. 51-54), which:

- Prohibits payments by, or on behalf of, a subcontractor in any tier under any Federally funded, negotiated subagreement, as an inducement to award a subcontract

- Provides for recovery of payments by court action or by withholding compensation otherwise due the subcontractor

- Imposes criminal penalties on any person who knowingly makes or receives such payments.

Antitrust laws are intended to ensure that markets operate competitively; violations of antitrust laws include:

- The existence of industry price lists or price agreements

- Simultaneous price increases or "follow-the-leader" pricing

- Rotation of bids or proposals so that each competitor takes a turn in the sequence as low bidder, or so that certain competitors bid low only on some sizes of subagreements and high on others

- Division of the market so that certain competitors bid low only for subagreements in certain geographical areas or on certain projects, and bid high on other projects

- Establishment by competitors of a collusive pricing system

- The filing of a joint bid or offer by two or more competitors when at least one of the competitors has sufficient technical capability and productive capacity for subagreement performance

- Any evidence of direct collusion among competitors, such as the appearance of identical calculations or spelling errors in two or more bids or offers.

Each contractor must include in its bid or proposal a certification of independent price determination. This document certifies that no collusion, as defined by Federal and State antitrust laws, occurred during bid preparation. In addition, the State may terminate a subagreement if it is discovered that a person or agency was employed or retained by the contractor solely to secure the subagreement for a commission, percentage, brokerage, or contingent fee. The State also may terminate the subagreement if the contractor, by offering or giving gratuities (in the form of entertainment, gifts, or otherwise), tries to elicit from any employee of the State or EPA aid in obtaining favorable treatment.

K. COST AND PRICE ANALYSIS

States must conduct a cost or price analysis, as appropriate, on every procurement action, including change orders to existing subagreements. Where the State conducts a cost or price analysis, contractors and subcontractors must submit supporting data to the State. This information may be provided on EPA Form 5700-41, "Cost and Price Summary" (see Exhibit II-3, on the following pages). This report may also be made in another format that provides similar information.

This section provides a further discussion of cost and price analyses.

K.1 Cost Analysis

The State must conduct a cost analysis on all negotiated subagreements estimated to exceed $10,000, and on all negotiated change orders regardless of cost (40 CFR 33.290). A cost analysis is defined as the review and evaluation of each cost element to determine the reasonableness, allocability, and allowability of the cost. This evaluation includes a comparison of the offeror's current cost estimates with: costs previously incurred by the offeror, the offeror's last prior cost estimate for similar items, current cost estimates from the State or other sources, and prior estimates of historical costs from other contractors for the same or similar items.

K.2 Price Analysis

A price analysis is required an all formally advertised procurements estimated to exceed $10,000 if there are fewer than three bidders. If there are three or more bidders on a formally advertised procurement, the State can assume, unless evidence demonstrates otherwise, that adequate price competition has taken place.

A price analysis is the process of evaluating a contractor's prospective price for a project, without regard to the contractor's separate cost elements and

EXHIBIT II-3

COST AND PRICE SUMMARY

EPA

COST OR PRICE SUMMARY

(See accompanying instructions before completing this form)

Form Approved
OMB No. 2030-0011
Approval expires 10-31-86

PART I — GENERAL

1. RECIPIENT	2. ASSISTANCE IDENTIFICATION NO
3. NAME OF CONTRACTOR OR SUBCONTRACTOR	4. DATE OF PROPOSAL
5. ADDRESS OF CONTRACTOR OR SUBCONTRACTOR *(Include ZIP Code)*	6. TYPE OF SERVICE TO BE FURNISHED
TELEPHONE NUMBER *(Include Area Code)*	

PART II — COST SUMMARY

7. DIRECT LABOR *(Specify labor categories)*	ESTIMATED HOURS	HOURLY RATE	ESTIMATED COST	TOTALS
		$	$	
DIRECT LABOR TOTAL:				$
8. INDIRECT COSTS *(Specify indirect cost pools)*	RATE	× BASE =	ESTIMATED COST	
		$	$	
INDIRECT COSTS TOTAL:				$
9. OTHER DIRECT COSTS				
a. TRAVEL			ESTIMATED COST	
(1) TRANSPORTATION			$	
(2) PER DIEM			$	
TRAVEL SUBTOTAL:			$	
b. EQUIPMENT, MATERIALS, SUPPLIES *(Specify categories)*	QTY	COST	ESTIMATED COST	
		$	$	
EQUIPMENT SUBTOTAL:				
c. SUBCONTRACTS			ESTIMATED COST	
			$	
SUBCONTRACTS SUBTOTAL:			$	
d. OTHER *(Specify categories)*			ESTIMATED COST	
			$	
OTHER SUBTOTAL:			$	
e. OTHER DIRECT COSTS TOTAL:				$
10. TOTAL ESTIMATED COST				$
11. PROFIT				$
12. TOTAL PRICE				$

EPA Form 5700-41 (Rev. 4-84) Previous editions may be used until supplies are exhausted.

EXHIBIT II-3 (Continued)

PART III — PRICE SUMMARY

13. COMPETITOR'S CATALOG LISTINGS, IN-HOUSE ESTIMATES, PRIOR QUOTES *(Indicate basis for price comparison)*	MARKET PRICE(S)	PROPOSED PRICE
		$

PART IV — CERTIFICATIONS

14. CONTRACTOR

14a. HAS A FEDERAL AGENCY OR A FEDERALLY CERTIFIED STATE OR LOCAL AGENCY PERFORMED ANY REVIEW OF YOUR ACCOUNTS OR RECORDS IN CONNECTION WITH ANY OTHER FEDERAL ASSISTANCE AGREEMENT OR CONTRACT WITHIN THE PAST 12 MONTHS?

☐ YES ☐ NO *(If "Yes" give name, address, and telephone number of reviewing office*

14b. THIS SUMMARY CONFORMS WITH THE FOLLOWING COST PRINCIPLES

14c. This proposal is submitted for use in connection with and in response to:
(1)

This is to certify to the best of my knowledge and belief that the cost and pricing data summarized herein are complete, current, and accurate as of:	*(2)* DATE

I further certify that a financial management capability exists to fully and accurately account for the financial transactions under this project. I further certify that I understand that the subagreement price may be subject to downward renegotiation and/or recoupment where the above cost and pricing data have been determined, as a result of audit, not to have been complete, current, and accurate as of the date above.

(3) TITLE OF PROPOSER	SIGNATURE OF REVIEWER	DATE OF EXECUTION

15. RECIPIENT REVIEWER

I certify that I have reviewed the cost/price summary set forth herein and the proposed costs/price appear acceptable for subagreement award.

(3) TITLE OF PROPOSER	SIGNATURE OF REVIEWER	DATE OF EXECUTION

16. EPA REVIEWER

(3) TITLE OF PROPOSER	SIGNATURE OF REVIEWER	DATE OF EXECUTION

EPA Form 5700-41 (Rev. 4-84) Page 2 of 5 proposed profit. Price analysis determines the reasonableness of the proposed subagreement price based on adequate price competition, previous experience with similar work, established catalog or market price, and law or regulation.

L. PROFIT ANALYSIS

The State must ensure that it pays only a fair and reasonable profit to its contractors. In a procurement action where there is no competition (e.g., a change order) and where price is based on a cost analysis (e.g., competitive and noncompetitive negotiation), the State must negotiate profit as a separate element of cost. To determine a reasonable profit, the State must consider the complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the level of subcontracting, the contractor's past performance record, and industry profit rates in the surrounding geographical area for similar work.

M. CONTRACTOR INDEMNIFICATION

Section 119 of CERCLA, as amended, authorizes the Federal government to indemnify response contractors for liability related to damage from releases of hazardous substances arising out of the contractor's negligent performance when adequate pollution liability insurance is not available to the contractor. This does not include liability as a result of gross negligence or intentional misconduct. Detailed guidance will be forthcoming to address what constitutes adequate liability insurance and when contractors for State-lead response can be indemnified by the Federal government. (Interim guidance on contractor indemnification is provided in the appropriate guidance document referenced in Appendix E.) All State requests for indemnification and questions on indemnification should be addressed to the Agency's Indemnification Task Force, Office of Waste Programs Enforcement.

* * * * *

Within this framework, the State must procure contractors to conduct remedial response at a site. The specific procedures that it will employ depend on whether the State is seeking to acquire the services of an A/E firm to conduct remedial planning activities or construction oversight, or to obtain a construction firm to implement the remedial action. Because procedures differ, they are discussed in separate chapters of this document. See Chapter III - Procurement of Engineering Services for procedures appropriate for A/E firms, and Chapter V - Procurement of Construction Contractors for procedures to be used when obtaining a construction firm.

III. PROCUREMENT OF ENGINEERING SERVICES

This chapter outlines the general requirements for procuring the services of an architectural and engineering (A/E) firm during any phase of remedial response. States may procure the services of A/E firms either through formal advertising or competitive negotiation. Formal advertising, in certain circumstances, is not always a practical approach, and thus competitive negotiation, which results in a cost-plus-fixed-fee contract, often is used. This chapter provides specific procedures for the two methods of competitive negotiation: the standard method and the optional method. In addition, it contains guidance that States may use to expedite procurement of A/E firms under either of the two competitive negotiation methods specifically described.

A. GENERAL REQUIREMENTS FOR PROCURING ENGINEERING SERVICES

States may employ the services of reputable A/E firms at almost any stage of remedial response. EPA's regulation governing procurement under assistance agreements, 40 CFR Part 33, allows the use of either formal advertising or competitive negotiation for obtaining an A/E firm. Further, the regulation provides two methods of competitive negotiation for obtaining such engineering services; either method may be used under Superfund Cooperative Agreements. The "standard method" involves selection of an engineering firm, taking into account both technical capabilities and the proposed cost to complete the work, and is discussed in Section B below. Selection using the "optional method" is based primarily upon the firm's technical capabilities, and is discussed in Section C.

Before the State initiates either procurement method, however, it is essential that the State perform a comprehensive evaluation of its needs to determine the appropriate procurement method, thus avoiding unnecessary delays. States should take the following steps to develop basic information for the procurement process:

- Determine, in general terms, the need, purpose, and objectives of the desired engineering services
- Identify the project scope of work
- Set the timetable for procurement and performance of A/E services

- Identify unique project considerations
- Determine the total project budget.

Once the State has developed this information, it can begin the procurement process.

If the State is using the standard competitive negotiation method, as defined by 40 CFR 33.505-33.520, the first procurement action is to issue a Request for Proposals (RFP). The RFP describes the project, lists proposal evaluation criteria and their relative importance, and gives the deadline and location for submission of proposals from interested firms. The aspiring A/E contractor's response to an RFP is a proposal detailing both the methods that it will use to perform the work required for the project and the estimated costs for these services.

If the State is using the optional method of procurement, as defined by 40 CFR 33.525, the first procurement action is the issuance of a Request for Statements of Qualifications (RFQ). The RFQ describes the project and the proposed scope of services, explains the evaluation criteria to be used and their relative importance, provides the names of persons that firms can contact to answer questions, and specifies the deadline and location for submission of the statements of qualifications (SOQs). In responding to an RFQ, a firm supplies general information about its qualifications to perform the proposed project and its experience in handling similar projects; it does not address specific scopes of work or costs to perform the project.

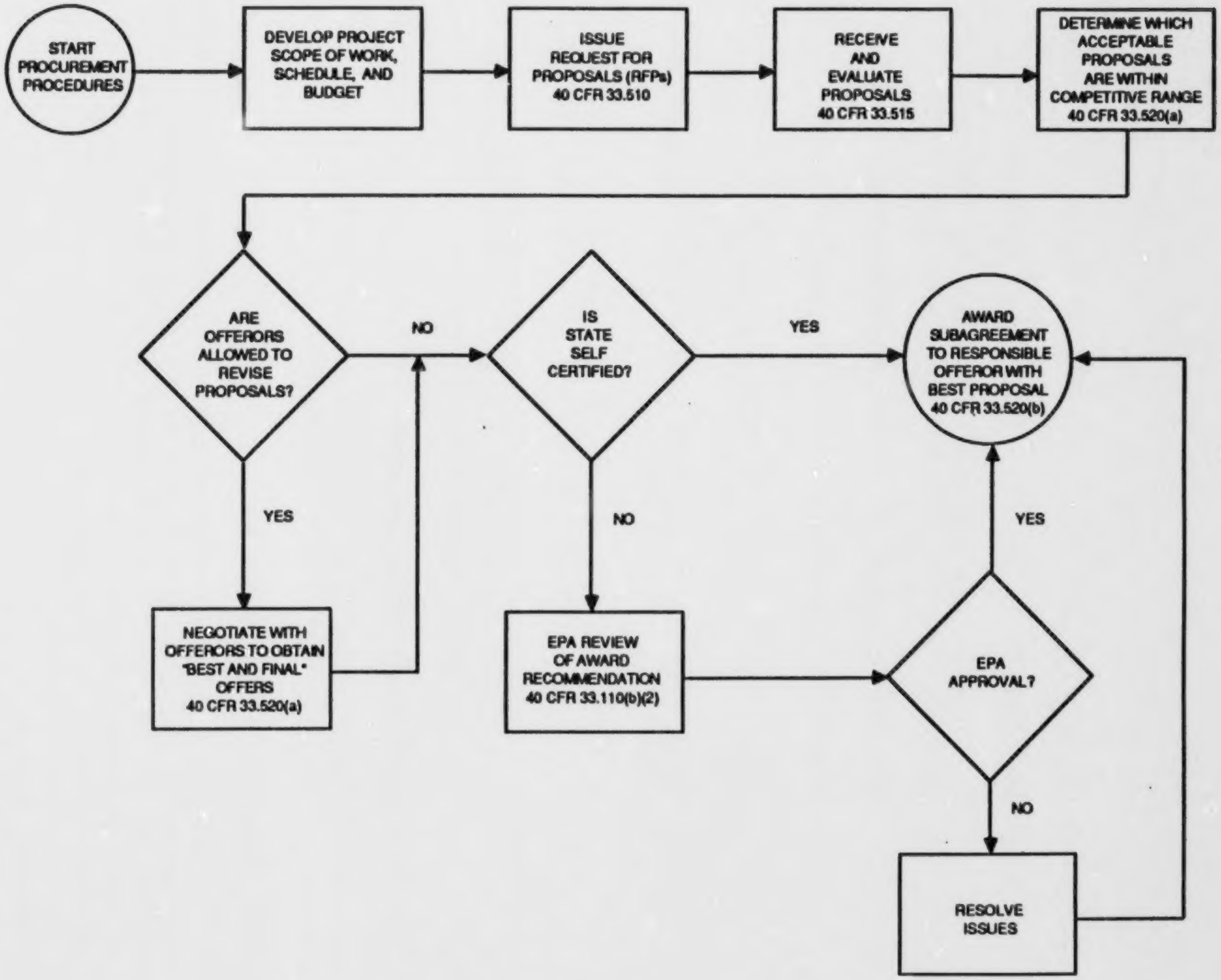
A more detailed discussion of these two methods for procuring A/E services under the Superfund program is provided in the following two sections.

B. STANDARD METHOD OF COMPETITIVE NEGOTIATION

Under the standard method of competitive negotiation for procuring A/E services, the State gives public notice of its intent to hire an A/E firm by publishing an RFP. It then evaluates the proposals received, negotiates with offerors judged to be within the competitive range to obtain their best and final offers, and awards the subagreement to the firm determined by the evaluation to be the most advantageous to the State. Exhibit III-1, on the following page, is a graphic representation of the process for obtaining A/E services by the standard method, as defined by 40 CFR 33.505-33.520.

EXHIBIT III-1

STANDARD METHOD FOR PROCUREMENT OF ENGINEERING SERVICES


START PROCUREMENT PROCEDURES
DEVELOP PROJECT SCOPE OF WORK, SCHEDULE, AND BUDGET
ISSUE REQUEST FOR PROPOSALS (RFPs) 40 CFR 33.510
RECEIVE AND EVALUATE PROPOSALS 40 CFR 33.515
DETERMINE WHICH ACCEPTABLE PROPOSALS ARE WITHIN COMPETITIVE RANGE 40 CFR 33.520(a)
ARE OFFERORS ALLOWED TO REVISE PROPOSALS?
NO
YES
NEGOTIATE WITH OFFERORS TO OBTAIN "BEST AND FINAL" OFFERS 40 CFR 33.520(a)
IS STATE SELF CERTIFIED?
YES
NO
EPA REVIEW OF AWARD RECOMMENDATION 40 CFR 33.110(b)(2)
AWARD SUBAGREEMENT TO RESPONSIBLE OFFEROR WITH BEST PROPOSAL 40 CFR 33.520(b)
EPA APPROVAL?
YES
NO
RESOLVE ISSUES

B.1 Request For Proposals

Proper development of the State's RFP is key to soliciting engineering services successfully. It is necessary that the State prepare an accurate and complete RFP that effectively addresses the issues specific to the project. Thus, the proposals received should be responsive to the State's needs. The RFP must be in writing, must contain sufficient information to enable a prospective offeror to prepare a proposal, must present all evaluation criteria and the relative importance attached to each, and must clearly state the deadline and location to submit proposals (40 CFR 33.510(c)).

When soliciting proposals, the State should:

- Accurately and completely describe the proposed project and engineering services required
- Provide project schedule requirements
- Describe any unique project requirements
- Include the names of persons to contact with questions on the selection process
- Determine the required content of the proposals, including, for example:
    - The availability of personnel, equipment, and facilities needed to complete the work
    - Recommendations and opinions from previous clients, as they relate to the specific project under consideration
- Provide a detailed cost estimate for the project.

State solicitations also should contain a minority and women's business enterprise (MBE/WBE) utilization plan.

B.2 Evaluating Proposals

Engineering firms expressing an interest in performing the work will offer proposals that, at a minimum, include a letter of interest, a statement that demonstrates the firm's understanding of the project, evidence of the firm's financial stability and its ability to perform the work, and a detailed cost proposal. The State then will use the evaluation criteria included in the RFP to analyze the submissions and determine the best proposal.

Using the standard method of procurement, the State may take either of two courses of action. It may begin negotiations with those firms within the competitive range best able to perform the work, to obtain their best and final cost proposal, as described in the following section, or, if the RFP states that the award may be based on initial offers alone, it may accept the best proposal without further negotiation. During the evaluation procedure, the State must consult the most current EPA "Master List of Debarred, Suspended, and Voluntarily Excluded Persons" (40 CFR 32.400) to ensure that the firms submitting proposals are not prohibited by EPA from participation in the assistance program. The Master List is updated weekly and is available from the EPA Office of Regional Counsel in each Region.

B.3 Negotiation and Subagreement Award

If the State does not choose a firm based solely on the original proposals submitted, the State begins negotiations with the firms within the competitive range to obtain best and final offers. If any single offeror is allowed to alter its proposal, all best-qualified offerors within the competitive range must be afforded the same opportunity (40 CFR 33.520(a)). At no time during negotiations may the State disclose the identities of competing offerors. The State also must not reveal any information contained within competing proposals (40 CFR 33.520(a)). To bring discussions to an end, the State must establish a common cut-off date which allows the offerors ample time to prepare and submit best and final offers.

The State then evaluates the final offers and decides which proposal is most advantageous to the recipient (40 CFR 33.520(b)). Price and other evaluation criteria in the RFP, including effective utilization of MBEs and WBEs, must be considered in making this determination. All factors used in determining the best-qualified offers within the competitive range must be fully documented. The firm chosen to receive the subagreement award must be notified immediately in writing, and all unsuccessful offerors must be informed of their rejection (40 CFR 33.520).

C. OPTIONAL METHOD OF COMPETITIVE NEGOTIATION

States may procure engineering services through a process by which the most highly qualified firms are located and requested to submit technical proposals. The State then selects the best technical proposal and negotiates with that offeror for fair and reasonable compensation for a specific scope of work (40 CFR

33.525). Should the State and offeror of the best proposal not be able to reach agreement, negotiations with that offeror must be terminated and the State negotiates with the offeror of the second-best technical proposal. This process continues until the State reaches agreement on the scope of services and corresponding compensation with a qualified offeror submitting an acceptable technical proposal.

Exhibit III-2, on the following page, is a graphic representation of the optional method for obtaining engineering services. The significant difference between the optional and standard methods for procuring engineering services is that, using the standard method, as defined by regulation, the State evaluates offerors taking price into consideration prior to selecting the responsible offeror whose proposal is determined to be the most advantageous to the State; using the optional method, the State selects the best technical proposal and then negotiates a price for the work.

C.1 Soliciting Statements of Qualifications

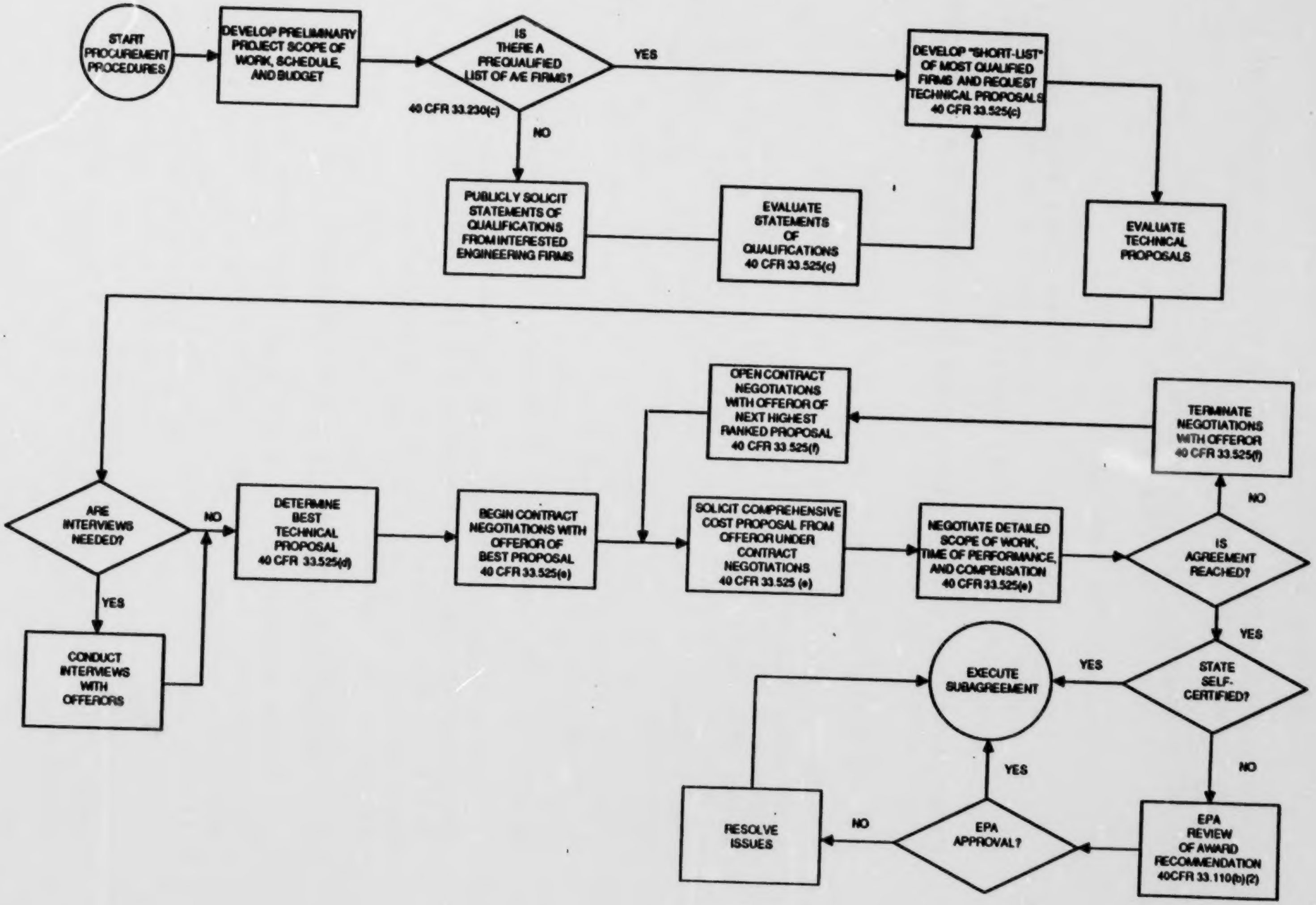
The optional method selection process begins with the State issuing a request to firms to submit SOQs and summaries of their experience in performing engineering services related to a specific project. The request may be made through a public solicitation (40 CFR 33.510) or by direct requests to engineering firms that have been identified by the State (prequalified) in the required disciplines (40 CFR 33.230(c)). States that maintain lists of prequalified engineering firms are required to update their lists at least every six months, to review and act on each request for prequalification made more than thirty days before the closing date for receipt of proposals, and to give adequate public notice of their prequalification procedures in accordance with the public notice requirements of 40 CFR 33.510.

State RFQs must include at least the following items:

- The requested scope of services
- A clear explanation of the criteria to be used in evaluating the SOQs and the relative importance of each criterion
- An MBE/WBE utilization plan
- The deadline (date and time) for submitting SOQs
- The names of persons to contact with questions.

EXHIBIT III-2

OPTIONAL METHOD FOR PROCUREMENT OF ENGINEERING SERVICES


START PROCUREMENT PROCEDURES
DEVELOP PRELIMINARY PROJECT SCOPE OF WORK, SCHEDULE, AND BUDGET
IS THERE A PREQUALIFIED LIST OF A/E FIRMS?
40 CFR 33.230(c)
YES
NO
DEVELOP "SHORT-LIST" OF MOST QUALIFIED FIRMS AND REQUEST TECHNICAL PROPOSALS 40 CFR 33.525(c)
PUBLICLY SOLICIT STATEMENTS OF QUALIFICATIONS FROM INTERESTED ENGINEERING FIRMS
EVALUATE STATEMENTS OF QUALIFICATIONS 40 CFR 33.525(c)
EVALUATE TECHNICAL PROPOSALS
ARE INTERVIEWS NEEDED?
NO
YES
CONDUCT INTERVIEWS WITH OFFERORS
DETERMINE BEST TECHNICAL PROPOSAL 40 CFR 33.525(d)
BEGIN CONTRACT NEGOTIATIONS WITH OFFEROR OF BEST PROPOSAL 40 CFR 33.525(e)
OPEN CONTRACT NEGOTIATIONS WITH OFFEROR OF NEXT HIGHEST RANKED PROPOSAL 40 CFR 33.525(f)
SOLICIT COMPREHENSIVE COST PROPOSAL FROM OFFEROR UNDER CONTRACT NEGOTIATIONS 40 CFR 33.525 (e)
NEGOTIATE DETAILED SCOPE OF WORK, TIME OF PERFORMANCE, AND COMPENSATION 40 CFR 33.525(e)
TERMINATE NEGOTIATIONS WITH OFFEROR 40 CFR 33.525(f)
NO
IS AGREEMENT REACHED?
YES
STATE SELF-CERTIFIED?
YES
EXECUTE SUBAGREEMENT
NO
EPA REVIEW OF AWARD RECOMMENDATION 40CFR 33.110(b)(2)
EPA APPROVAL?
YES
NO
RESOLVE ISSUES

The State's criteria for evaluating and ranking offerors may include:

- Education, experience, and expertise of the offeror's principals and key staff members
- The offeror's general experience, financial stability, and history of performance
- Availability of personnel, equipment, and facilities needed to complete the work
- Plans for MBE/WBE utilization
- Recommendations and opinions from each offeror's previous clients as these relate to the specific project under consideration.

Other criteria may be used, depending upon the specific requirements of the project.

C.2 Evaluating Statements of Qualifications

The State must evaluate the responses received to eliminate all respondents who are obviously unqualified or otherwise incapable of performing the required work. The State then must develop a "short list" that includes three or more of the most highly qualified offerors, based upon the evaluation criteria listed in the RFQ. In developing this list, the State must consult the most recent EPA "Master List of Debarred, Suspended, and Voluntarily Excluded Persons" (40 CFR 32.400) to ensure that the firms selected are not excluded from the assistance program. The Master List is updated weekly and is available from the Office of Regional Counsel in each EPA Region.

Ranking of the firms must be based on qualifications, anticipated quality of work, and prospects for satisfactory completion of the project. It also should ensure that each offeror's submittals meet the criteria set forth in the RFQ.

C.3 Soliciting and Evaluating Proposals

After selecting the most qualified offerors, States must request technical proposals from the offerors and must inform them of the evaluation criteria the State will use to rank the technical proposals (40 CFR 33.525(c)). The RFP should specify that each proposal submitted must define the offeror's intended concept and approach to the planning, organization, and management of the project. Upon receipt, the technical proposals are evaluated carefully. At this point, the State may wish to meet individually with the short-listed offerors to obtain additional information to be used in determining which offeror is most qualified. Once the State has made its determination, it must provide written notification to the offeror of the best technical proposal (40 CFR 33.525(d)) and then may begin subagreement negotiation.

C.4 Negotiation and Award of Subagreement

After the offeror of the best technical proposal is notified, the State may initiate negotiations to develop the details of the scope of work and corresponding compensation. Specific elements that must be established during these negotiations include:

- Project schedule
- Manpower requirements
- Level of effort
- Scope of services and deliverables
- Areas of responsibility and liability
- Fee structure, amount of compensation, and method of payment.

The offeror must submit a comprehensive cost proposal addressing the above items in detail, to be used as the basis for the State's cost analysis and negotiations. During the negotiation process, the State and offeror must reach a complete and mutual understanding of the scope of professional services to be provided and the level of performance desired. The negotiation process offers both parties the opportunity to refine, amend, and clearly define the services to be rendered for the compensation to be paid, as well as the areas of responsibility and liability for those services.

When the State and the offeror agree on the scope of work and adequate compensation, the State may execute a subagreement and issue a notice to proceed with the work, provided the State has certified its procurement system to EPA. (See Chapter II for subsequent action when States are not self-certified.) If it is not possible for the State and offeror to reach an agreement, the State must terminate negotiations with that offeror and reinstitute the process with the offeror of the next-best technical proposal (40 CFR 33.525(f)). The procedure is repeated until an agreement is reached.

D. EXPEDITING PROCUREMENT OF ENGINEERING SERVICES

The State may choose to use different firms for conducting the remedial investigation/feasibility study (RI/FS) and overseeing the engineering design/ construction, thus performing two separate procurements. This situation, however, may delay the entire remedial response process at the site.

To minimize such delays, the State may include the RI/FS and engineering design/construction oversight within a single procurement. To leave this option open, the State's original RFP for engineering services must indicate that the RI/FS is the initial activity that will be authorized and that the State may execute an option for design and construction oversight services through a separate notice to proceed, subject to the availability of funding to amend the Cooperative Agreement and the negotiation of an acceptable cost. In this manner, the State could choose to use a single A/E firm if the design and construction project(s) is funded and the firm is able to perform the work. This method of procurement should improve the continuity of technical activities, accelerate project schedules, and reduce State administrative costs associated with procuring technical services. In those instances where the lead for response activities at a site shifts from EPA- to State-lead, the State may use EPA's A/E contractor without further public notice or evaluation, provided the State has EPA's approval and follows the rest of the requirements in 40 CFR Part 33 to award the subagreement. See Appendix C for further information.

When undertaking the lead for remedial planning the State also is encouraged to expedite necessary procurement within the framework presented in this chapter. Under normal circumstances, procurement actions for remedial planning may require several months to complete and thus may delay the remedial response. Exhibit III-3, on the following page, describes four suggested alternatives for expediting the initiation of remedial planning. These should be considered on a case-by-case basis, as appropriate.

* * * * *

The next chapter -- Chapter IV - Engineering Services During Remedial Response -- presents a brief description of the various services that an A/E firm can provide to the State during remedial response activities at uncontrolled hazardous waste sites, both in the course of remedial planning and during the remedial action phase.

EXHIBIT III-3

METHODS FOR EXPEDITING PROCUREMENT*

Type	Summary
Options Contract for Site Remedial Planning Activities	The State includes both remedial planning and remedial action in the initial Cooperative Agreement application. Following completion of the RI/FS and selection of a remedy, remedial design and remedial action are funded by amendment. The State's request for proposals (or similar documents) for engineering services also covers all remedial phases, but indicates that only RI/FS activities will be funded, with an option to conduct the design and remedial action engineering services subject to the availability of funds.
Pre-Award Procurement	The State starts procurement activities such as issuing requests for proposals, negotiations, and selection of a qualified firm before the award of the Cooperative Agreement. A procurement subagreement then can be signed immediately after the award of funds. State personnel costs prior to award are not allowable; however, these costs should not be significant.
Procurement for Multiple Site Planning	States with numerous sites and available funding for cost-sharing may issue a level-of-effort type subagreement similar to EPA's remedial contracts. Once in place, site planning activities could be started immediately following the award of an individual Cooperative Agreement, without the need for site-specific procurement actions.
Procurement Using Prequalifications	The State compiles a list of available contractors by requesting qualifications from firms capable of performing remedial planning activities. The list of prequalified firms then is used to solicit site-specific proposals. However, prequalification procedures must ensure adequate competition.

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*All methods shown must be consistent with EPA's procurement regulation, 40 CFR Part 33. See Appendix C for information on retaining the same architectural/engineering firms for follow-on remedial response activities.

IV. ENGINEERING SERVICES DURING REMEDIAL RESPONSE

Architectural and engineering (A/E) firms can provide assistance to States during all phases of remedial response. Traditionally, A/E firms have conducted the remedial investigation/feasibility study (RI/FS) and the remedial design (RD). In addition, the State can utilize A/E firms to provide other types of assistance, including conducting biddability/constructability reviews of designs developed by other A/E firms, assisting in the procurement of a construction contractor, managing the construction, managing change orders, and assisting the State in resolving claims. In the latter case, if there is an apparant conflict of interest between the planning/design of a remedy and its construction, the A/E firm that developed the design cannot provide assistance during claims negotiation. Exhibit IV-1, on the following page, presents a graphic representation of points during remedial response at which engineering services may be used.

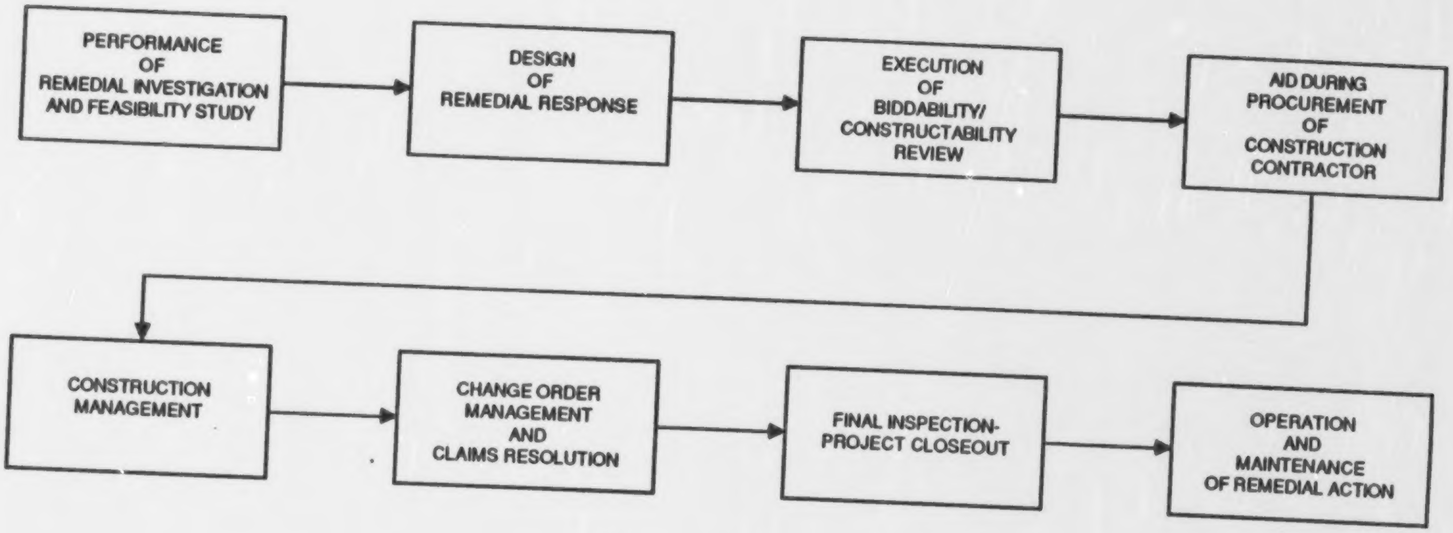
Since A/E firms can provide such varied services, this chapter discusses the nature of the assistance that they can lend to States throughout remedial response. Specifically, the sections below consider the following subjects:

- Section A - RI/FS
- Section B - RD
- Section C - Biddability and constructability reviews
- Section D - Bid-phase services
- Section E - Construction oversight services
- Section F - Claims
- Section G - Operation and maintenance (O&M).

To provide additional assistance, each section includes a generalized scope of work for the types of activities that an A/E firm may be requested to perform at each of these points in remedial response. Additional Superfund guidance documents on these topics are referenced in Appendix E.

EXHIBIT IV-1

TYPES OF ENGINEERING SERVICES TYPICALLY USED DURING REMEDIAL RESPONSE ACTIVITIES


PERFORMANCE OF REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
DESIGN OF REMEDIAL RESPONSE
EXECUTION OF BIDDABILITY/ CONSTRUCTABILITY REVIEW
AID DURING PROCUREMENT OF CONSTRUCTION CONTRACTOR
CONSTRUCTION MANAGEMENT
CHANGE ORDER MANAGEMENT AND CLAIMS RESOLUTION
FINAL INSPECTION-PROJECT CLOSEOUT
OPERATION AND MAINTENANCE OF REMEDIAL ACTION

In using this chapter, States are reminded that A/E firms are only one option available to perform the types of work described in Sections C through F. Alternatively, at various points States may choose either to perform the work themselves, to seek assistance from EPA which will obtain the services of the U.S. Army Corps of Engineers (COE) or to utilize an independent management consulting firm to accomplish this work. Since A/E firms are such a valuable resource, however, this chapter considers their services separately. Other options cited above and technical requirements for the aspects of remedial response detailed below in Sections C through F are discussed in Chapter V, which describes in full the construction firm procurement process.

A. REMEDIAL INVESTIGATION/FEASIBILITY STUDY

After an A/E firm is hired and before the RI/FS is initiated, a detailed scope of work for the project is prepared. The scope of work describes the current situation at the site and includes a compilation of all available existing information. It also includes plans for the quality assurance program and sampling analysis (QAPP/SAP), health and safety, site management, data management, and community relations.

Once the scope of work is approved, the RI is performed to assess the problems and dangers associated with the site. The site is mapped and investigated by sampling the ground water, surface water, soils, and other appropriate elements to determine the probable extent of the hazard. The wastes present in drums, tanks, pits, lagoons, or other locations or containers also are characterized by sampling and analysis. After the data are gathered, the danger presented by the site is assessed and treatability studies, in the form of pilot or bench scale treatment processes, are performed to determine an appropriate remedial action to control or remove the hazard. All data are gathered and analyzed, and the RI report is issued.

The FS is initiated in parallel with the RI and identifies and analyzes the various remedial technologies available to eliminate or control the hazards associated with the site. As specified in section 121 of CERCLA, as amended, alternative remedies must be evaluated for their ability to protect human health and the environment; to attain Federal and State applicable or relevant and appropriate requirements; utilization of permanent solutions and alternative treatment technologies; and cost-effectiveness. The criteria upon which to base this evaluation and remedy selection effort are described in CERCLA, section 121(b), as amended.

The results of these investigations and studies are used by the State and EPA to develop the Record of Decision (ROD) for the site. They also are used by the A/E firm to prepare a Pre-design Report which includes conceptual site plans, outline specifications, and a preliminary schedule and projected cost estimate for remedial action.

Activities that an A/E firm may be called upon to perform during the RI/FS may vary considerably, depending upon the conditions at the site. They may include the following:

- Compile existing site information
- Prepare project operations plans, including the health and safety, sampling and analysis, site management, and community relations plans
- Incorporate the existing information and project operations plans into the detailed scope of work for the RI/FS
- Prepare complete and detailed site maps
- Characterize wastes present on-site in drums, tanks, pits, lagoons, etc.
- Conduct a sampling and analysis program to define the extent of the contamination present at the site and its environs
- Perform an endangerment assessment
- Perform pilot and bench-scale treatability studies
- Issue an RI Report
- Identify available remedial technology alternatives
- Analyze alternatives for technical feasibility, exposure and risk, environmental effects, compliance with government regulations, and cost
- Issue an FS Report
- Assist in preparation of the ROD
- Prepare the Pre-design Report, including conceptual site plans, outline specifications, preliminary schedule, and projected cost estimates.

A model SOW for an RI/FS and additional discussion can be found in the State Participation in the Superfund Program manual. Guidance on RIs and FSs is provided in the appropriate Superfund program guidance documents referenced in Appendix E.

B. REMEDIAL DESIGN

After the RI/FS is completed and the ROD is issued, the remedial action can be designed. To conduct this design, the State may use the same A/E firm, as described in Section D of the previous chapter, or may procure the services of a different A/E firm. If the State chooses the latter option, it must conduct the necessary procurement action using the procedures outlined in Chapter III of this document.

All available information gathered during the RI/FS is used to develop the preliminary design. Preparation of the design then is begun and an evaluation is performed to determine whether any additional data are needed to move into the final design phase. A design memorandum is submitted to the State to provide a summary of the design parameters, the facilities to be designed, and the estimated construction costs. This informs the State of the direction the engineer intends to take in developing the design. The products of an engineering design include detailed construction drawings and precise and complete technical specifications. The engineering firm should utilize some form of internal technical review to ensure the constructability/operability of the design and to conduct value engineering screens of potential remedies for the site. In addition, the A/E firm conducting the design can play a major role in obtaining any permits necessary to implement the remedial response.

Specific types of services that the A/E firm performing the design may be required to provide will vary considerably, depending on the project at hand. Tasks assigned to the design firm may include the following:

- Develop preliminary design and performance criteria (if laboratory services are required, quality assurance/quality control procedures must be established and followed; see the State Participation in the Superfund Program manual)

- Conduct subsurface investigations and/or a sampling program, if necessary to supplement data gathered during the RI/FS

- Conduct site surveys

- Prepare the design memorandum
- Prepare detailed construction drawings and technical specifications
- Conduct pilot and bench scale treatability studies
- Determine bidding and subagreement administration requirements
- Prepare a probable estimate of construction costs
- Perform value engineering
- Conduct initial constructability/operability reviews of the design
- Prepare an initial O&M plan
- Assist in obtaining permits
- Attend progress meetings and prepare progress reports
- Develop the preliminary construction schedule
- Participate in the public information/community relations program.

Additional guidance on specific procedures for RDs may be found in the appropriate guidance document referenced in Appendix E.

C. BIDDABILITY AND CONSTRUCTABILITY REVIEW

After the design documents have been substantially completed, the State can begin to develop the subagreement bid documents to procure the construction contractor, as described in Section V.B of this manual. Bid documents include the solicitation itself as well as the subagreement documents. These are highly technical in nature, outlining all requirements for the proposed project, and provide the basis for the contractors' bids for the project.

Therefore, the State should subject its bid documents to a rigorous biddability/constructability review prior to initiating the procurement action. This will help to avoid bid protests and also should reduce the need for change orders and the potential for claims. Biddability/constructability reviews should examine the accuracy and adequacy of the construction specifications, schedule, estimates of quantities and types of materials, and cost estimates; they also should ensure that the subagreement bid documents present project requirements in a clear, coherent manner.

The State has several options for performing this type of review: it may choose to do so itself, may request the assistance of the COE through EPA (both of which are discussed in Section V.C of this document), or may secure the services of an A/E firm. If the State uses an A/E firm, it must procure a firm other than the contractor that developed the design, since this review must be independent.

Specific services that the State may request an A/E firm to provide in conducting a biddability/ constructability review may include the following:

- Review construction administration procedures, such as for payments, construction document control, change orders, shop drawings, and submittal of O&M data
- Review technical drawings and specifications for coordination, accuracy, adequacy, and clarity
- Review estimated construction schedule and duration
- Review start-up and operational testing requirements
- Review overall control of work and coordination with subagreement provisions
- Review cost estimates
- Prepare summary of recommended changes to subagreement documents, together with estimates of affects on costs
- Review adequacy of occupancy and acceptance procedures
- Review bidding documents
- Review instructions to bidders for accuracy, completeness, and compliance
- Review construction subagreement documents for compliance with applicable regulations.

Specific procedures that States may use to request EPA assistance to conduct biddability/constructability reviews may be found in Section C of the following chapter.

Additional guidance may be found in the appropriate Superfund guidance document referenced in Appendix E.

D. BID-PHASE SERVICES

Use of an A/E firm during procurement of a construction contractor can provide the State with the experience necessary to ensure that all tasks associated with the bidding are performed properly. The State may use an A/E firm to prepare the text of the solicitation for bids; to ensure that as many steps as possible are taken to conduct competitive bidding to include women's and minority business enterprises (WBEs/MBEs) and other qualified firms; to conduct a pre-bid conference; to prepare and issue any necessary addenda to the bid documents; to direct the bid opening; to assist the State in evaluating the apparent low bidder and recommending contract award; and to assist in the resolution of any bid protests.

Specific tasks that the State may request the A/E firm to perform during oversight of construction contractor procurement include the following:

- Prepare the text for solicitation for bids (advertisement)
- Conduct the final biddability/constructability review of the design prepared by another A/E firm, including the plans and technical specifications
- Conduct claims mitigation review of construction subagreement documents
- Develop and assemble the final subagreement documents
- Issue the solicitation for bids by public notice and to the reference list of qualified bidders, MBEs, and WBEs
- Advise MBE/WBE agencies and construction trade agencies of the solicitation
- Distribute bidding and subagreement documents to prospective bidders
- Distribute lists of prospective bidders to all plan holders
- Conduct a pre-bid conference

- Attend progress meetings and prepare progress reports
- Review requests for clarification of documents; prepare and issue modifications to documents by addenda
- Conduct the bid opening and tabulate the bids
- Evaluate the qualifications, financial stability, and responsiveness of the apparent low bidder
- Prepare the recommendation for award of the subagreement
- Assist in the resolution of any bid protests
- Participate in the public information/community relations program.

Procedures for solicitation and evaluation of any bids received are found in Sections D through F of the following chapter. See the appropriate Superfund guidance document referenced in Appendix E for additional information.

E. CONSTRUCTION OVERSIGHT SERVICES

During construction, the State may use an A/E firm to act as the State's designated agent to administer the construction subagreement. The A/E firm may provide a variety of services during this phase of remedial response. Among these may be full-time, on-site inspection, coordination of materials testing, and review of shop drawings to ensure that materials and equipment used comply with the requirements in the subagreements. A/E firms also may administer change orders to the subagreement, monitor construction progress compared to the construction contractor's schedule, conduct regular progress meetings, respond to questions from the construction contractor concerning the intent of the subagreement documents, and provide other services to minimize conflicts between the parties of the subagreement and avoid or resolve claims.

Among the specific tasks that the State may request its A/E firm to perform as part of construction oversight are the following:

- Prepare construction subagreement documents for execution
- Conduct a pre-construction conference

- Conduct periodic site investigations during construction or provide full-time, on-site inspection
- Review shop drawings
- Administer the construction subagreement and any change orders
- Coordinate materials testing
- Review and certify construction contractor requests for payment
- Conduct substantial completion and final completion inspections
- Conduct periodic progress meetings
- Prepare record documents
- Monitor the construction contractor's schedule of construction progress
- Maintain complete project records
- Respond to requests for information or clarification of construction subagreement documents from the construction contractor
- Coordinate construction activities with Federal, State, and local agencies
- Attend progress meetings and prepare monthly progress reports on the construction
- Assist the State in managing change orders
- Evaluate claims
- Participate in the public information/community relations program
- Prepare the final technical report at the conclusion of the remedial action
- Assist the State in other activities, as appropriate.

Additional guidance can be found in the appropriate Superfund guidance document referenced in Appendix D.

F. CLAIMS

Occasionally, despite careful project management, claims will arise that the State cannot resolve easily. If negotiation does not bring about a settlement, the claim must be carried into either mediation, arbitration, or litigation. The State can use an A/E firm to help evaluate the merits of claims and to provide technical expertise during the formal resolution process. In many cases, claims involve matters of law that require evaluation by an attorney. In this case, States should seek expert legal advice; States are discouraged from defending themselves against claims brought by contractors who are represented by legal counsel without the benefit of legal assistance.

Specific tasks that A/E firms may conduct in assisting States in claims defense include:

- Develop an as-built construction schedule and evaluate it against the planned schedule
- Evaluate subagreement language to determine the design intent as compared to claimed extra work
- Evaluate direct costs of claimed extra work
- Evaluate the construction contractor's accounting of overhead costs and the allocation of such costs to the project
- Issue written recommendations concerning the merits of any claims filed, except when there is an apparant conflict of interest
- Develop a negotiating strategy for claims mitigation or defense, except when there is an apparant conflict of interest
- Represent the State as an "expert witness," if required.

A more comprehensive discussion of claims can be found in Chapter VI of this document.

G. PLANNING FOR OPERATION AND MAINTENANCE DURING REMEDIAL ACTION

Under CERCLA, States are fully responsible for O&M of remedial activities at Superfund sites; however, planning for the assumption of O&M responsibilities is an inherent part of the remedial action design and implementation.

Therefore, EPA may continue to share in costs for activities during the phase of remedial action that ensures a remedy is operational and functional.

During this period, which is not to exceed one year, costs continue to be shared at the same percentages as during implementation of the RA. In the case of remedial action to restore contaminated ground or surface water, however, CERCLA, as amended, provides that activities may be considered remedial action and cost sharing may occur for a period up to ten years after the construction or installation and commencement of operation of the restoration activities or until a protective level as defined in the ROD is obtained, whichever occurs first.

In planning for the assumption of O&M responsibilities, States may procure the services of an A/E firm to do the following:

- Review and revise the preliminary O&M plan
- Evaluate operating staff members' needs
- Develop instructional materials and conduct on-site training programs
- Develop maintenance management programs
- Assist during initial start-up and operational testing
- Develop sampling and analysis programs
- Develop records management systems
- Prepare detailed O&M manuals
- Assist in developing initial O&M budgets
- Assist in developing safety and emergency response programs
- Participate in the public information/community relations program

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* If the State wishes to retain a firm to conduct O&M after Federal assistance ends, it may do so under the terms of its own State procurement requirements, since EPA does not share in the costs of O&M beyond the phase of remedial action that ensures the remedy is operational and functional.

- Assist in the procurement of a firm to conduct O&M*
- Prepare the final technical report at the conclusion of the cost-sharing period
- Attend progress meetings and submit progress reports.

Specific tasks may differ, depending on the requirements of the site. Additional guidance on planning for O&M is provided in the appropriate Superfund guidance document referenced in Appendix E.

* * * * *

Subagreements for construction management must be properly coordinated with subagreements for construction. The following chapter -- Chapter V - Procurement of Construction Contractors -- provides guidance for procuring the use of such construction contractors; it shows where the A/E oversight firms fit into the construction procurement process and details how this integration can occur. In addition, after the State has awarded a subagreement for either remedial planning activities or construction management, as discussed in this chapter, it must exercise proper administration procedures to ensure that the work is implemented in a timely manner and to help reduce the likelihood of any procurement problems, such as change orders and claims. Chapter VI - Subagreement Administration provides guidance for proper subagreement administration.

V. PROCUREMENT OF CONSTRUCTION CONTRACTORS

The required method of procuring construction contractors during Superfund remedial response is formal advertising (40 CFR 33.405-33.430). Formal advertising involves the public solicitation of sealed bids and the award of a subagreement based on a fixed fee (lump sum, unit price, or a combination of the two) to the lowest, responsive, responsible bidder. Formal advertising also requires the recipient to give adequate public notice of the solicitation inviting bids and to state when and how prospective bidders may obtain and examine the bidding documents, including the subagreement documents. A graphic representation of this process is presented on the following page as Exhibit V-1.

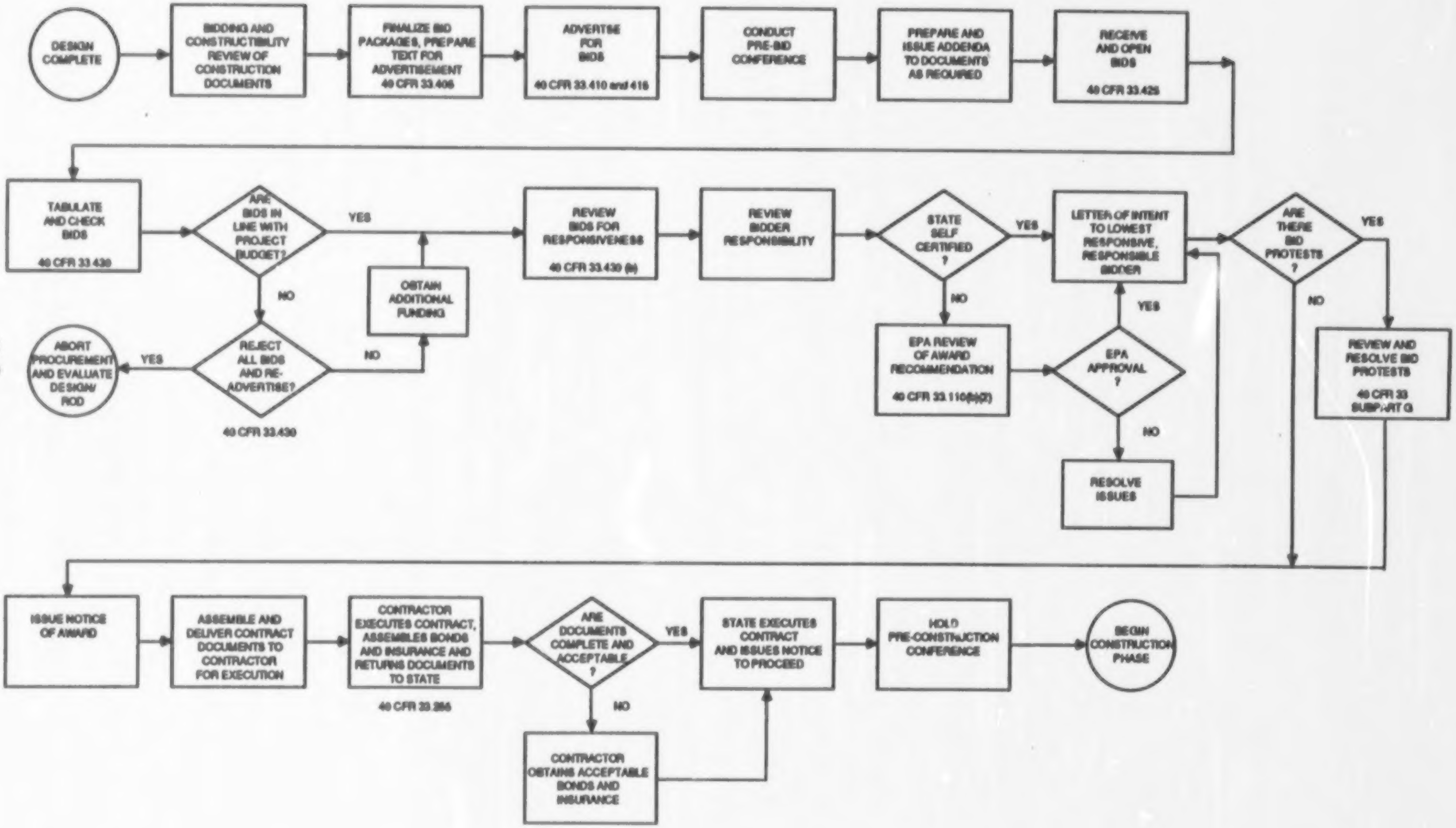
In special cases, a variation of the formal advertising procurement method, called two-step formal advertising, may be utilized. This method may be used when it is possible to prepare performance-based specifications but impractical to prepare detailed specifications to support an award based on price. The procedures and requirements for implementing two-step formal advertising are different from traditional formal advertising, and therefore, are presented separately in Appendix A.

This chapter provides guidance on the formal advertising method as it applies to procuring Superfund construction contractors, especially during remedial implementation. Within this framework, it specifically discusses each of the steps that constitute procurement of construction contractors, and potential complications for this process, in the following sections:

- Section A - Development of cost estimates for construction
- Section B - Preparation of subagreement documents
- Section C - Biddability/constructability review of the subagreement documents
- Section D - Solicitation of bids
- Section E - Evaluation of bids
- Section F - Bid protests
- Section G - Subagreement award.

EXHIBIT V-1

CONSTRUCTION CONTRACTOR PROCUREMENT PROCEDURES


DESIGN COMPLETE
BIDDING AND CONSTRUCTIBILITY REVIEW OF CONSTRUCTION DOCUMENTS
FINALIZE BID PACKAGES, PREPARE TEXT FOR ADVERTISEMENT 40 CFR 33.405
ADVERTISE FOR BIDS 40 CFR 33.410 and 415
CONDUCT PRE-BID CONFERENCE
PREPARE AND ISSUE ADDENDA TO DOCUMENTS AS REQUIRED
RECEIVE AND OPEN BIDS 40 CFR 33.425
TABULATE AND CHECK BIDS 40 CFR 33.430
ARE BIDS IN LINE WITH PROJECT BUDGET?
YES
NO
REJECT ALL BIDS AND RE-ADVERTISE?
40 CFR 33.430
YES
ABORT PROCUREMENT AND EVALUATE DESIGN/ ROD
NO
OBTAIN ADDITIONAL FUNDING
REVIEW BIDS FOR RESPONSIVENESS 40 CFR 33.430 (b)
REVIEW BIDDER RESPONSIBILITY
STATE SELF CERTIFIED ?
YES
NO
EPA REVIEW OF AWARD RECOMMENDATION 40 CFR 33.110(b)(2)
EPA APPROVAL ?
YES
NO
RESOLVE ISSUES
LETTER OF INTENT TO LOWEST RESPONSIVE, RESPONSIBLE BIDDER
ARE THERE BID PROTESTS ?
YES
NO
REVIEW AND RESOLVE BID PROTESTS 40 CFR 33 SUBPART G
ISSUE NOTICE OF AWARD
ASSEMBLE AND DELIVER CONTRACT DOCUMENTS TO CONTRACTOR FOR EXECUTION
CONTRACTOR EXECUTES CONTRACT, ASSEMBLES BONDS AND INSURANCE AND RETURNS DOCUMENTS TO STATE
40 CFR 33.265
ARE DOCUMENTS COMPLETE AND ACCEPTABLE ?
YES
NO
CONTRACTOR OBTAINS ACCEPTABLE BONDS AND INSURANCE
STATE EXECUTES CONTRACT AND ISSUES NOTICE TO PROCEED
HOLD PRE-CONSTRUCTION CONFERENCE
BEGIN CONSTRUCTION PHASE

To provide the maximum benefit to manual users, Section B contains a detailed discussion of the technical components of subagreement documents, as well as the process for preparing them.

While the State retains ultimate responsibility for ensuring that the procurement is conducted properly, it has several options for preparing and reviewing the necessary documentation, evaluating the bids, and overseeing the procurement process. It may choose to retain sole responsibility for procurement while consulting with EPA as necessary; it may request EPA to obtain the assistance of the U.S. Army Corps of Engineers (COE) at appropriate points in the procurement process; it may retain the services of a management firm; or it may use an architectural and engineering (A/E) firm to oversee procurement. In any case, the procedures contained in this chapter apply. Details on the types of services that an A/E firm can be requested to provide during remedial construction are discussed in Chapter IV of this document.

A. DEVELOPMENT OF COST ESTIMATES FOR CONSTRUCTION

The first step in obtaining a construction contractor is the development of an accurate total cost estimate for the project. This is essential to ensure adequate funding for a remedial action. Preparation of a set of high-quality construction plans and specifications for the project, discussed in the following section of this chapter, is inadequate unless the project cost estimate is prepared to the same standards. For most projects, the final project cost estimate should be within +15 percent to -10 percent of the actual cost. The total costs should factor in supervision and administration, and engineering and design costs during construction; these are calculated as a percentage of the actual estimated project costs and together should range between 7 and 9.5 percent.

The State also should establish a contingency fund for each site-specific remedial action project to cover unforeseen cost variances which may occur prior to or during construction. Contingencies should be included as part of the total costs. Contingency funding for State-lead remedial action projects is actually a two-stage process. First, the State should establish a bid contingency to cover variances in cost that may arise before construction commences. This bid contingency should be included in the Cooperative Agreement funding the project, and is usually equal to 15 percent of the actual project cost estimate. Any amount of the bid contingency not needed to cover variances prior to construction then could be moved to a construction contingency, used to cover variances caused by change orders approved during the course of the remedial action.

In addition, the Region's Superfund Comprehensive Accomplishments Plan (SCAP) contingency will retain a construction contingency, equal to 8 to 10 percent of the project cost, for each remedial action project. If, at the conclusion of the construction contract bidding process the State does not have sufficient funds to establish a construction contingency fund within the 8 to 10 percent range, the State may request the Region to amend the Cooperative Agreement to add funds for this purpose from the Regional SCAP contingency. A more detailed discussion of this subject can be found in the appropriate Superfund guidance document referenced in Appendix E.

B. PREPARATION OF SUBAGREEMENT DOCUMENTS

After the construction cost estimates are made, the State can prepare the subagreement documents. These will be made available to prospective bidders as part of the bid documents, along with the solicitations for the project, and will provide specific information upon which the construction firms can base their bids. After a subagreement has been awarded, these subagreement documents will be signed to execute the subagreement. A State can expedite the procurement process and minimize or avoid bid protests, change orders, and claims by developing high-quality, unambiguous subagreement documents that contain a clear and accurate description of the technical requirements of the remedial action project, as detailed in 40 CFR 33.255 and 33.420.

Subagreement documents include plans, specifications, form of subagreement, and all other documents upon which the remedial action contractor relies to form his bid. They designate the quality, quantity, and arrangement of materials and equipment, and specify the methods by which these materials and equipment are to be assembled at the job site. They contain a statement of the price to be paid, payment terms, and time allowed to complete the work specified. Subagreement documents also provide a description of the terms and conditions of the subagreement to be awarded and an explanation of the procedures for bidding, evaluating bids, and awarding the remedial action subagreement. As such, they must provide complete, accurate information on all requirements that will be placed on a construction firm in the course of remedial action.

Subagreement documents must be technically adequate and complete to promote cost-competitive bids while ensuring on-time completion of the project within budget. Failure to adequately prepare construction bid documents increases the possibility for bid protests, change orders, and claims for additional compensation. Therefore, it is especially important that States be aware of the necessary contents for these documents. To provide States with a tool to help ensure that the bid documents are complete, Exhibit V-2, on the following page, is a sample checklist of contents for adequate construction subagreement documents.

The State has two options in preparing construction subagreement documents. It may choose to prepare them itself, in which case it may request assistance from EPA and, through EPA, from the COE. If the State chooses the other option, it either may use the services of the A/E firm that developed the design or may obtain an independent A/E firm to prepare the documents. This latter option is described in Section B of the previous chapter. To date, these documents typically have been prepared by the A/E firm that developed the remedial design.

This section provides detailed guidance on the contents of high quality, complete subagreement documents. It is equally applicable whether the State prepares such documents or retains an A/E firm to do so.

B.1 Subagreement Provisions

The construction subagreement documents must display the provisions that will be in the subagreement upon its execution. Several specific requirements apply to the necessary contents of the subagreement documents. First, States, in each subagreement, must include clauses that meet the intent of 40 CFR 33.1015-33.1021. These sections contain requirements for:

- Subagreement provisions (33.1015)
- Labor standards (33.1016)
- Patents data and copyrights (33.1019)
- Violating facilities (33.1020)
- Energy efficiency (33.1021).

Second, States must include the appropriate clauses from 40 CFR 33.1030, or their equivalent, in all subagreements. These clauses contain State and contractor responsibilities for:

- Changes
- Differing site conditions

EXHIBIT V-2

SAMPLE CHECKLIST OF CONSTRUCTION SUBAGREEMENT BID DOCUMENT CONTENTS

- ________ Index of Subagreement Bid Documents
- ________ Advertisement for Bids
- ________ Instructions to Bidders
- ________ Bid Form
- ________ Addenda Acknowledgement
- ________ Bid Bond or Bid Security Form
- ________ Certificate of Surety
- ________ Acknowledgement of Principal Form
- ________ Non-Collusion Affidavit
- ________ Certification of Nondiscrimination in Employment
- ________ Certification of Nonsegregated Facilities
- ________ Authority to Execute Subagreement
- ________ Form of Subagreement
- ________ Performance Bond Form
- ________ Payment Bond Form
- ________ Certificate of Ability to Obtain Insurance
- ________ General Conditions of the Subagreement
- ________ Supplemental General Conditions of the Subagreement
- ________ Federal Requirements and Subagreement Provisions
- ________ Davis-Bacon Wage Rate Determination
- ________ General Subagreement Requirements
    - ________ Scope of Work
    - ________ Control of Materials
    - ________ Utility Coordination Requirements
    - ________ Project Supervision Requirements
    - ________ On-Site Inspection Procedures
    - ________ Safety Requirements and Responsibilities
    - ________ Emergency Procedures
    - ________ Progress Schedule and Report Requirements
    - ________ Payment Procedures (Measurement and Payment)
    - ________ Change Order Administration Procedures
    - ________ Correspondence Distribution
    - ________ Submittal, Processing Procedures
    - ________ Material and Equipment Storage Requirements
    - ________ Close-out Requirements
- Technical Specifications
- ________ Drawings and Plans (certified by a registered professional engineer)
- ________ Supplemental Data (e.g., geologic data, hydrologic data)

- Suspension of work
- Remedies
- Price reduction for defective cost or pricing data
- Audit and access to records
- Covenant against contingent fees
- Gratuities
- Contractor responsibilities
- Termination
- Final payment
- Supersession
- Privity of subagreement.

States must be sure to include all subagreement provisions that will be applicable to the project.

B.2 Specifications

In developing technical specifications for proposed remedial action projects, the State must incorporate a clear and accurate description of the technical requirements for any necessary materials, products, or services, along with the required performance schedule. States are required to avoid the use of detailed product specifications if at all possible. If the State judges it to be impractical or uneconomical to clearly and accurately describe technical requirements, it may use a "brand name or equal" description to define expected performance or other technical requirements. The State must clearly describe, in the technical specifications for projects for which it is requesting bids, the salient requirements of the named brand which must be met by offerors (40 CFR 33.255(c)).

B.3 Bonds and Insurance

In accordance with 40 CFR 33.265, States must require remedial action contractors to furnish bonds as a guarantee of faithful subagreement performance. Remedial contractors also must provide insurance for accidents and catastrophic loss to manage any risk inherent in completing the project. Therefore, bonds and insurance requirements must be clearly and accurately stated in the subagreement bid documents, including the amounts of security and coverage that bidders will be required to provide.

B.3.a Bonds

Bonds are a form of surety that includes bid guarantees, performance bonds, and payment bonds. For construction under $100,000, States must follow their own requirements for bonding. For construction subagreements over $100,000, States must meet the intent of the EPA bonding requirements, articulated in 40 CFR Part 33.265. The EPA Award Official may accept the State's bonding policy, however, if it is equivalent to the EPA requirements.

In accordance with 40 CFR 33.265, States must require construction contractors to furnish bonds as a guarantee of faithful performance of the subagreement. These bond requirements must be stated clearly in the construction subagreement documents, as follows:

- Each bidder shall provide a bid guarantee equivalent to five percent of the bid price. The bid guarantee shall consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument, accompanying a bid as assurance that the bidder, upon acceptance of the bid, will execute such contractual documents as the State may require within the time specified.
- The contractor shall provide a performance bond equivalent to the subagreement price. The performance bond is required to secure fulfillment of all the contractor's obligations under the subagreement.
- The contractor also shall provide a payment bond of 100 percent of the subagreement price. The contractor executes the payment bond in connection with the subagreement to assure payment, as required by law, to all persons supplying labor and materials in execution of the work provided for in the subagreement.

Whenever bonds are required, bidders and contractors shall obtain them from companies holding certificates of authority as acceptable sureties (31 CFR Part 223).

B.3.b Insurance

The State should not execute a subagreement until the contractor has offered sufficient certification that all contractual insurance requirements have been fulfilled. Contractors must be aware of the insurance requirements that pertain to the remedial action construction project for which they are submitting a bid; the construction subagreement documents, therefore, must coherently present the specific types of insurance needed.

Insurance normally required for remedial action activities includes the following:

- Insurance coverage needed by a contractor -- engineering or construction -- to protect itself from direct losses, including:
    - Property damage
    - Burglary, robbery, and theft
    - Dishonesty of employees through forgery or embezzlement
    - Builder's risk (with the State as the named insured)
- Insurance coverage needed by a contractor -- engineering or construction -- to protect itself against claims by third parties, including:
    - Contractor's public liability
    - Contractor's protective liability
    - Contractual liability
    - Completed operation/premises liability
    - Worker's compensation liability
- Comprehensive general liability, bodily injury, and third party property damage
- Vehicle liability -- when vehicles are used in the performance of the subagreement -- for collision liability and protection and indemnity liability
- Insurance provided by a contractor to protect the State, including the State's protective liability and coverage for damage to State property not otherwise protected.

In addition, for work within a special flood hazard area, the State and contractor must comply with the Flood Disaster Protection Act of 1973. If the site is within a special flood hazard area, the construction contractor must be covered by flood insurance.

Most insurance coverages can be combined so that all contemplated risks of each classification are covered under one comprehensive policy. States should seek expert advice in identifying the required types and amounts of insurance for each remedial response subagreement.

When the State requires a contractor to provide insurance, the policies should contain an endorsement that any cancellation or significant change will not be allowed unless the insurer and the contractor provide written notice to the State.

Generally, under the Superfund program, contractors are reimbursed for the reasonable portion of their insurance allocable to the subagreement work. (See 48 CFR 31.2 for additional information on such insurance requirements.) Insurance requirements eligible for funding must be specified in the Cooperative Agreement; this includes Environmental Impairment Liability Insurance. The Agency recognizes that in some instances requirements for Environmental Impairment Liability Insurance may limit competition on remedial response projects. Those firms that can spread the cost of the associated premiums over several projects may be more able to keep costs reasonable, while firms that cannot do this must include the full cost of such insurance in their bid packages and thus in many cases are not the lowest bidder.

B.4 Payment Terms

EPA and State commitments for transfer of funds under a Cooperative Agreement and for the drawdown and use of these funds are detailed in the the State Participation in the Superfund Program manual. States are required to develop budgets to ensure that sufficient funds are allocated for the project and that they meet EPA financial management needs.

Individual subagreement documents must detail the payment terms that will govern provision of compensation to State contractors. States usually choose to compensate contractors using progress payments, whereby the State provides money to its contractor as portions of the work are completed. Procedures governing progress payments and State retainage of progress payments are determined by individual State laws. In general, progress payments may be made for the amount and value of services and/or construction work performed; for materials and equipment delivered to, or stored near, the project site; and for undelivered items or materials specifically manufactured for the subagreement, provided that the appropriate insurance, security, and protection of Federal and State interests are included in accordance with the agreement documents.

Any State or EPA requirements for documentation to accompany contractor payment requests must be clearly described in the subagreement documents. Specific documentation requested by the State may include progress reports of services performed as of the date of the request for payment (usually required for engineering services), periodic construction progress reports (usually prepared by the on-site representative on a remedial action project), and updated construction schedules (usually developed and maintained by construction contractors).

In addition, subagreement documents must specifically describe terms for final payment. These should include the following items:

- Definition of satisfactory completion of all services and deliverables for engineering subagreements
- Requirements for final inspections, certifications, and warranties, as well as for transfer of responsibility and liability for construction subagreements (see the State Participation in the Superfund Program manual for a discussion of final inspection and certification)
- Requirements for release of retainages, including those that are contingent upon EPA audit, if any
- Means for resolving disputes and claims under the terms of the subagreement
- Final accounting of all payments, including modifications to the subagreement price as a result of change order agreements.

These are requirements of the final payment subagreement clause, contained in 40 CFR 33.1030.

B.5 Project Control

To properly administer a remedial response project, the subagreement documents must specify the procedures that the State will use to monitor performance under the subagreement. Such procedures and requirements should be detailed in the general requirements section of the subagreement, and may include the following:

- Project meetings, including pre-planning, predesign, and pre-construction conferences and periodic progress meetings

- Progress schedule development and periodic update reports
- Submittal review procedures
- Procedures for payment
- Change order administration procedures
- Testing and laboratory services requirements
- Instructions for preparing record documents
- Subagreement closeout procedures
- Roles and limitations of responsibility of contracting parties.

Descriptions of these procedures and requirements in the subagreement documents help ensure that the contractor is advised of administrative needs. Contractors thus can provide an adequate allowance in the proposed fee or bid price for the costs and potential schedule effects resulting from these requirements.

B.6 Schedule Requirements

The subagreement documents should require the selected contractor to prepare, submit, and update a progress schedule for the proposed project. An accurate, updated construction schedule plan is critical to the State's ability to monitor contractor progress, to evaluate requests for additional time and money to complete any work beyond the original subagreement terms, and to forecast the financial (i.e., cash flow) needs of the project. Specifically, the schedule can be used to:

- Define the contractor's proposed work plan, showing the order in which the contractor intends to perform the work
- Identify the dates upon which the contractor intends to start and complete each of the major components of the work
- Identify the dates for submittals and reviews of submittals
- Identify schedules for procurement of materials and equipment to be used in the work

- Assist in determining rates of progress in completing the work to determine when to make periodic progress payments.

Subagreement documents should include, as a minimum:

- A description of the type of schedule that the contractor will be required to provide (e.g., bar chart, Gantt chart, critical path method)
- Requirements for updating the schedule, including periodic analyses of progress, to be submitted in conjunction with, and as a condition of, the contractor's applications for payment
- A description of the relationship of the schedule to such considerations as pending or authorized change orders and claims, and threatened or pending suspension and/or termination of the work of the subagreement.

The State may choose to include additional requirements, as necessary. Potential contractors will factor time and resource requirements for schedule development and updates into their bids for the construction subagreement.

B.7 Change Order Provisions

An important consideration to be addressed in these documents is administrative requirements for changes in the subagreement scope of work. Thorough, expert preparation of subagreement language concerning change orders is of critical importance in controlling project costs, promoting satisfactory project progress, and reducing the potential for claims and litigation. The subagreement documents must:

- Clearly describe how additions, deletions, or revisions in the work may be made without invalidating the subagreement
- Define exactly what is meant by a change order; for example, by specifying conditions that would warrant a change order
- Describe the procedures to be followed in preparing change order documents, including the form and content of the initial request for changes in the work, as well as required documentation of the accepted change

- Include a statement covering subsequent recourse should the contracting parties not be able to reach agreement on a proposed change.

The documents also must specify any required limitations to increases in the subagreement price and/or extensions of the subagreement period of performance.

B.8 Health and Safety Issues

Much of the work performed under remedial subagreements, both engineering and construction, may be inherently hazardous. States, therefore, must require their contractors to satisfy all Federal, State, and local statutes, regulations, and ordinances related to health and safety practices. Contractors also must be required to develop and submit to the State for review, a health and safety plan for the specific project work. This key subagreement requirement can be enforced by including in the subagreement a provision specifying that payment will be contingent upon the contractor's satisfactory compliance with all applicable health and safety requirements.

States are required to have site health and safety plans in place before field activities can commence. A health and safety plan provides for the protection of on-site personnel and area residents during hazardous waste operations. Normally, States will engage a contractor for technical services to develop their health and safety plans.

Plans must be consistent with site conditions and must comply with the following:

- CERCLA sections 104(f) and 111(c)(6)

- State Health and Safety Statutes

- Hazardous Waste Operations and Emergency Response, Occupational Safety and Health Administration (OSHA) interim final rule, 29 CFR 1910.120, December 19, 1986. This rule references EPA order 1440.2, "Health and Safety Requirements for Employees Engaged in Field Activities," July 12, 1981 and the NIOSH/OSHA/USCG/US EPA Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, October 1985.

A health and safety plan must be included in all subagreements awarded under the Cooperative Agreement and must be tailored to meet site conditions. The OSHA rule states that each employer shall develop and implement a safety and health program for its employees involved in hazardous waste operations. Service contractors are equally covered by the law, and their employees who will be involved in hazardous waste operations must meet the training and medical surveillance requirements of 29 CFR 1910.120. Each site-specific safety plan must be submitted to the EPA remedial project manager (RPM) for review. Review assistance is available to the EPA RPM from EPA-certified On-Scene Coordinators or from the National Response Team, Edison, New Jersey. See the appropriate Superfund guidance document referenced in Appendix D for further information.

B.9 Subagreement Close-Out Requirements

The subagreement documents should contain a concise description of how the State will determine that work has been completed satisfactorily in accordance with the terms of the subagreement. The documents must specify such items as:

- The manner in which the project will be determined to be substantially complete
- A description of the contractor's liabilities and responsibilities at the time of substantial completion, including any operation and maintenance (O&M) procedures to be performed by the contractor at the site
- The State's liabilities and responsibilities at the time of substantial completion of the project, including any site O&M procedures to be performed by the State
- Requirements for final inspection
- Requirements for submission of a final technical report
- Procedures for applying for and receiving final payment
- A description of the contractor's continuing obligations subsequent to subagreement completion; this may include, for example, warranties, guarantees, and, often for remedial action projects, a one-year warranty and maintenance of the surety bond to guarantee adequate performance of the project's facilities.

States are required to submit a close out report at the completion of each operable unit to document that the work was completed. As a provision in the subagreement documents, a State should require the construction contractor to provide the information necessary to prepare the close out reports for EPA. At the conclusion of the remedial action, a final close out report must be prepared which documents that the criteria established in the feasibility study (FS) and the Record of Decision (ROD) have been met. The final close out report must provide sufficient information to ensure deletion of the site from the National Priorities List. Further guidance on developing the final close out report will be forthcoming.

C. BIDDABILITY AND CONSTRUCTABILITY REVIEW

States should consider having their bid documents for remedial action projects subjected to an independent biddability/constructability review, after design is substantially complete, as a method of preventing bid protests. Such technical assistance should contribute to the efficient, effective implementation of remedial activities.

A biddability/constructability review for remedial action generally:

- Reviews the accuracy of the construction specifications and cost estimates
- Determines whether currently accepted construction practices and techniques are being used
- Determines the adequacy of the proposed components of the quality assurance project plan, the draft O&M Plan, and the site safety specifications
- Determines whether the bid schedule included in the specifications will enable the construction contractor to submit a fair and reasonable bid
- Determines the accuracy of any estimated quantities of material specified in the design
- Determines that the responsibilities and liabilities of the construction contractor and the State are clearly defined and detailed in the design documents.

Tasks that may be required during biddability/constructability review are detailed in Section D of the previous chapter and in the appropriate Superfund guidance document referenced in Appendix E.

The State may perform this review itself, may obtain the service of an A/E firm to do so, or may request EPA to secure the assistance of the COE to conduct biddability/constructability reviews. COE reviews will occur concurrently with any internal review the State may choose to conduct and should not result in delays to the remedial action procurement process. Because the COE routinely performs remedial activities for Federal-lead remedial sites, they are well qualified to perform biddability/constructability reviews for Superfund remedial action projects and their technical expertise should prove extremely useful to a State. As a condition of the Cooperative Agreement, EPA also may require the COE to perform such a review for States whose projects EPA considers to be technically complex or to have severe time constraints.

A State may request COE review by contacting its Regional program office. EPA will request such a review under EPA's technical assistance Inter-Agency Agreement with the COE. The EPA Regional Office should consider the cost of such a review and incorporate it into the Region's SCAP estimates at the beginning of the fiscal year. Should it prove impossible to include the required costs in the SCAP, the EPA Region may request use of funds from the Regional SCAP contingency fund for remedial planning activities. The Headquarters SCAP contingency fund for remedial action activities also can be used if all other options have been considered and will not provide sufficient assistance.

Internal State reviews should use the same general criteria as those performed by the COE. Biddability/constructability review by an independent A/E firm is discussed in Section IV.C of this document.

D. SOLICITATION OF BIDS

When soliciting bids, States are required to give adequate public notice of a proposed project. To accomplish this the State should publish notifications in daily newspapers and periodicals of sufficient circulation to promote effective competition, such as newspapers with a State-wide circulation and trade journals.

Information describing bidding procedures generally is contained in several sections of the public notice of solicitation and the bidding documents for the project. States must ensure that the bidding documents are clearly written, explicit, and internally consistent as described above. The documents must include the following elements:

- A statement giving adequate public notice of the solicitation, inviting bids, describing the work required for the project, and explaining when and how the subagreement documents may be obtained or examined (40 CFR 33.410)
- The requested scope of services
- Requirements for using minority and women's business enterprises
- Instructions to bidders
- A clear explanation of the recipient's methods of bidding and of evaluating bid prices, and the State's basis and method for awarding the subagreement (40 CFR 30.420(c))
- The deadline (date and time) and place to submit bids (40 CFR 33.420(f))
- The required bid form (or proposal)
- The date, time, and place at which the bids will be publicly opened and read (40 CFR 33.425)
- Representations and certifications
- Names of persons to contact with questions
- Measurement and payment requirements
- General (and supplementary) conditions of the subagreement.

For complex subagreements or where unique circumstances require, the State may wish to conduct a pre-bid conference. At the pre-bid conference, bidding procedures are explained and prospective bidders are given the opportunity to raise questions about the project.

E. EVALUATION OF BIDS

Bids are received in sealed envelopes from prospective contractors and are opened publicly at the date and time specified in the solicitation (40 CFR 33.425). Bids are reviewed for general responsiveness to the bid solicitation and the name and amount of each bid is read aloud.

The State must uniformly and objectively evaluate all bids submitted in response to a solicitation, to award the subagreement to the lowest, responsive, responsible bidder (40 CFR 33.430). In doing so, the State must use the methods and criteria described in the subagreement documents (40 CFR 33.420). This evaluation is intended to fulfill two purposes. First, it confirms the bidder's responsiveness to the contractual requirements of the solicitation for bids. To be responsive, a bid must constitute a definite and unqualified offer to meet all material terms of the Invitation for Bids (IFB). Material items are those that affect price, quality, quantity, or delivery, or those that must be complied with at the risk of rejection for nonresponsiveness. Exhibit V-3, on the following page, provides a sample bid tabulation checklist for confirming bidder responsiveness.

Second, the bid evaluation establishes the responsibility, qualifications, and financial stability of a bidder to perform the work of the project in accordance with the subagreement documents, to the State's satisfaction, and within the prescribed time. An evaluation of a bidder's responsibility must include consideration of the following items:

- Past (completed) project performance record and current workload
- A list of major equipment available for use, and the extent of ownership interest in each item
- Credit references from materials suppliers
- Bank references
- Insurance references
- Bonding company references, including present bond capacity
- Qualifications of proposed subcontractors
- Experience of the proposed job superintendent and foremen
- Verification that the contractor or its employees have not been banned from assistance program participation by EPA (i.e., review the U.S. EPA Master List of Debarred, Suspended, and Voluntarily Excluded Persons, available from Regional grants offices and the Office of Regional Counsel) (40 CFR 32.400).

PROJECT:

CONTRACT NO.:

BID DATE:

EXHIBIT V-3

SAMPLE BID TABULATION CHECKLIST

Contractor	Total Bid Amount	State Registration No.	Addenda Acknowledged	Signature	Bid Bond	Compliance Statement	Non-Collusion Statement	Certfication	Non-Discrimation Statement	Experience Statement	Power of Attorney/Bond	Surety Co. Statement	Surety Certificate	Comments

Exhibit V-4, on the following page, depicts a sample bid review checklist for evaluating a bidder's responsibility. The State may obtain assistance from an A/E firm in evaluating the bids, as described in Chapter IV, but the State has full responsibility for ensuring that the evaluation is conducted properly.

Two potential problems may be encountered in bid reviews: bids may exceed the project budget stated in the subagreement documents and solicitation, or bids may be significantly less than the project budget. Both of these are discussed below.

E.1 Bids Exceeding the Project Budget

Bids in excess of the project budget may result from one or more of the following causes:

- Subagreement documents may be incomplete, inaccurate, or ambiguous, thus forcing the bidder to add contingencies to the bid to cover the uncertainty of expected performance.
- An unreasonable period of time for completion of the work may require an accelerated rate of production at a higher project cost.
- Construction specifications may be unduly restrictive, for example, by imposing unreasonable or unfair conditions on the contractor or by unnecessarily restricting methods of construction and selection of materials and products.
- An insufficient period of time between the solicitation for bids (advertisement or request for proposals (RFP)) and bid opening may prevent careful analysis and preparation of bids or proposals.
- The responsibility for incomplete or uncertain data affecting the work may have been placed on the contractor, who then must include contingencies in the bid to cover the cost of the worst possible conditions. For example, specifications that place unreasonable or technically impossible performance criteria upon the contractor may result in bids that include undesirable contingencies, such as for differing site conditions. States are reminded of the

EXHIBIT V-4

SAMPLE BID REVIEW CHECKLIST FOR CONTRACTOR RESPONSIBILITY

Project: Contractor

Bonding Company

Underwriter:
Local Agent:
Address:
Contact:
Telephone:
Years Affiliated:
Bond Capacity:

Bank

Name:
Address:
Contact:
Telephone:
Years Affiliated:

Insurance Company

Name:
Address:
Contact:
Telephone:
Years Affiliated:

Credit Reference (Materials Supplier):

Past Contracts:

Debarment - Is contractor, or a member of the contractor's firm, included on EPA Master List of debarments?

Present Workload

Owner	Description	Engineer (Reference)	Value ($)

Contract List
(3 years)
Equipment List
Resumes, Supt:
Foreman:

requirement to include model subagreement clauses in each subagreement (40 CFR 33.1030); the model subagreement clause for differing site conditions does not allow States to shift risk associated with differing site conditions to contractors.

- The original project budget may be in error compared with the true market cost of completing the work.

The State should consult with its A/E design firm when bid prices significantly exceed estimates. If the lowest, responsive bid received exceeds the amount anticipated in the project budget, the State may, at its option, implement one of the following actions:

- Reject all bids and revise the documents (correcting any problems such as those noted above and/or reducing the project scope) and rebid the work
- Augment the available project funds with non-EPA funds
- Request additional EPA financial assistance (after pursuing other options).

If the State chooses to take deductive alternates (defined as optional scope of work items clearly identified as such in the bidding documents), it must ensure that all responsive bids are reviewed under the revised bid formulation and that deductive alternates have been taken in the exact order shown in the IFB. The State also must ensure that only sufficient deductive alternates have been taken to reduce at least one of the bids to or below the amount of funds available and the scope of the project remains consistent with the original project description.

If the low bid still exceeds the amount of available funds, the State may:

- Augment the available project funds with non-EPA funds
- Reject all bids and ask the design engineer to redesign the project, within the scope of the ROD, to reduce the total project cost
- Request additional EPA funding.

The last option requires the State to provide EPA with documentation supporting the need for additional funding.

Such documentation must include written confirmation that redesign of the project within the approved scope and project schedule cannot reasonably be expected to sufficiently reduce the cost of the project, and a certification that the State cannot reasonably provide the additional funds required.

E.2 Bids Significantly Less Than the Project Budget

Bids significantly less than the project budget or out of line with other bids can result from any of the following causes:

- Subagreement documents may be technically incomplete or may not adequately describe the scope of the project
- The project budget may be overstated (overly conservative)
- The low bidder may have made a mathematical error in the preparation of the bid or may have significantly underestimated the scope of the project
- The subagreement documents may be administratively ambiguous on the subject of how the bid is to be prepared
- The low bidder may have purposely submitted an unreasonably low bid in an attempt to "buy-in".

Buying-in means intentionally submitting an offer below calculated costs, while anticipating an increase in the subagreement amount after award (e.g., through unnecessary or excessively priced change orders), or expecting to receive follow-on subagreements that would result in the recovery of losses incurred on a buy-in subagreement. Preparation of complete, accurate RFPs and bid documents that clearly describe the scope of services or work required can minimize buying-in benefits and control additional costs after award.

If a bid mistake is discovered or suspected, the State must request written verification of the bid amount in question from the bidder, allowing the bidder adequate time to respond. The bidder either may confirm the bid amount by denying the error or may confirm the mistake and request that the bid be either corrected or withdrawn. To be allowed to correct a bid, the bidder must demonstrate by clear and convincing evidence the existence of the error, its nature, how it occurred, and the intended amount. To withdraw a bid, the bidder must confirm the existence of the error and how it occurred, and must request that the bid be withdrawn. Procedures for bid correction and withdrawal normally are included under an "Instructions to Bidders" section of the bidding documents.

States must carefully consider and document each request for bid correction or withdrawal to ensure that the integrity and legality of the bidding process is not compromised and that the correction or withdrawal is not unfair to other bidders. In many cases, if consistent with State law, a State must waive minor informalities and irregularities in the bid if doing so does not give a bidder an identifiable advantage or benefit not enjoyed by other bidders which would prejudice the subagreement award.

If the lowest bid is significantly less than the project budget and the State has reasonably determined the bidder to be responsive and responsible, the subagreement should be awarded and the remaining funds used as a contingency during construction. In this case, however, States should be alert to the possibility of a "buy-in" and should be prepared to administer the subagreement in a manner that adequately controls change order costs.

F. BID PROTESTS

Bid protests are written complaints filed by parties with a direct financial interest affected by the State's procurement action. Complaints typically concern the solicitation (e.g., content or wording of, or deficiencies in, the IFB or RFP and in specifications) or the actual award of subagreements. Bid protests may significantly delay the initiation of a remedial project. Thus, in order to reduce the likelihood of bid protests, it is vital to ensure that solicitations for bids or proposals be clear and unambiguous, and accurately present the State's needs without unduly restricting competition.

A State is required to establish procedures to promptly consider and resolve bid protests when they are filed (40 CFR 33.1110). Although not required to do so, a State generally should defer award of the subagreement and delay initiation of remedial activities until it can make a determination on the protest. If the State does not defer the procurement, it assumes the risk that the EPA Award Official may disallow the cost of the procurement action(s) in question, in the event that a protest appeal is filed and upheld. Upon the State's resolution of the bid protest, all affected parties have seven calendar days to file a protest appeal with the appropriate EPA counsel.

A protestor may file an appeal with EPA only after the State has acted on the bid protest and the protestor has exhausted all available administrative remedies at the State level. Further, the protestor may file an appeal only when the State's procurement action has adversely affected the protestor's direct financial interests. A subcontractor may file a protest appeal only for issues relating to a contractor's award of a subcontract. The administrative process for EPA's resolution of bid protest appeals is contained in 40 CFR 33.1105-33.1145.

When EPA receives a protest appeal, the Agency will request the State to defer award of the disputed subagreement (40 CFR 33.1140). If the protestor does not agree to a request from the State for a reasonable extension of the bid or bid bond period while the protest or appeal is pending, the State or EPA can summarily dismiss the protest or appeal.

EPA's review of protest appeals is limited to issues arising under the provisions of 40 CFR Part 33 and from alleged violations of State and local laws or ordinances when EPA has determined that there is an overriding Federal concern. EPA reviews the record considered by the State and any additional information regarding the basis of the appeal and renders a final decision (40 CFR 33.1130-33.1145). EPA's decision concerning a protest appeal is the final EPA action on the subject. If a State does not comply with EPA's determination, EPA may take action against the State under 40 CFR Parts 30 and 32 (40 CFR 33.1145(i)).

G. SUBAGREEMENT AWARD

If the State has self-certified its procurement methods to EPA and EPA has not exercised its authority to review and approve the award prior to its being made (40 CFR 33, Subpart A), the State can issue a formal Notice of Award to the contractor immediately after its selection as a result of the bid evaluation. If the State is not self-certified, EPA must be given the opportunity to review the procurement actions taken by the State before formal Notice of Award can be given. In addition to the Notice of Award, the State must issue instructions to the contractor regarding the execution of the subagreement and the filing of insurance required for construction, as detailed in the subagreement bid documents. At the time of award, it is customary to provide each bidder with a copy of the bid tabulation.

* * * * *

The State must properly administer the subagreement for construction after its award to minimize the need for change orders and to avoid claims. Procedures for effective subagreement administration are found in the following chapter, Chapter VI - Subagreement Administration. To provide assistance in overseeing the conduct of the remedial action, the State may obtain the services of an A/E firm, as detailed in Chapter IV - Engineering Services During Remedial Response.

VI. SUBAGREEMENT ADMINISTRATION

Subagreements must be administered carefully to minimize unnecessary change orders and avoid claims. Change orders and claims are most likely to occur as part of construction, but may happen at any phase of remedial response. Major components of a good subagreement administration process are discussed in this chapter. Section A provides guidance on holding a preliminary performance planning conference after subagreement award, to inform all key personnel of the roles and responsibilities of each of the interested parties. Section B discusses the submission of periodic progress reports to enable the State to closely monitor the project and to be advised of any problems that may develop. Section C considers issues relating to change orders, including conditions that warrant change orders, change order evaluation, and change order preparation. Finally, Section D addresses issues relating to contractor claims.

A. PRELIMINARY PERFORMANCE PLANNING CONFERENCE

After award of a subagreement, the State should arrange a conference with key contractor personnel to explain subagreement requirements and administrative procedures. For construction subagreements, this meeting typically is known as a pre-construction conference. For engineering services associated with remedial design (RD), this meeting usually is called a pre-design meeting. Similar meetings should be held for the other phases of remedial response.

These meetings are intended to promote efficient, cost-effective mobilization of the work by:

- Emphasizing applicable regulatory requirements
- Setting the ground rules for working relationships between State and contractor personnel
- Identifying the responsibilities and authorities of each party
- Identifying interrelationships of contractors, consultants, the State, the municipality, EPA, the U.S. Army Corps of Engineers (COE), and other involved parties

- Highlighting critical subagreement requirements
- Discussing project completion schedules or intermediate milestones and any required coordination between contractors
- Discussing progress reporting and subagreement payment procedures
- Emphasizing requirements for such issues as compliance with Federal, State, and local laws and regulations, such as equal employment opportunity, and for the use of minority, women's, small, or disadvantaged business enterprises
- Detailing subagreement change order procedures, insurance bonding, and safety requirements.

Discussion of these items at an early stage of all subagreements is critical to efficient and effective project administration.

B. MONITORING WORK PROGRESS - PERIODIC PROGRESS REVIEW

EPA conducts an ongoing review of technical progress to ensure that the State carries out its Cooperative Agreement commitments. Therefore, all contractors using EPA funds, providing engineering services or construction, or performing some other service for the State, should prepare reports on their activities. The State, then, can use these reports to keep EPA informed about progress at the site. Monthly contractor reports should advise the State of any anticipated problems in completing work within the terms (scope, time, and amount) of each subagreement to ensure that the State and EPA are involved early in their resolution.

The report should be brief and, at a minimum, should include the following elements:

- Project/Subagreement Identification Information: project title; subagreement number; date of the report; contractor's name; project phase/subagreement type (whether the contractor is performing services during the RD, biddability/constructability review, bid, construction, or operation and maintenance (O&M) phase of the remedial activities); services offered (e.g., engineering, sample testing, well drilling, construction, claims analysis/defense); and reporting period.

- Cash Flow: original subagreement value; amount of approved change orders; current subagreement total; cumulative payments to the contractor to date. The percentage of the current subagreement amount paid to the contractor should be computed and listed, and an estimate of the percentage of the work that has been completed should be provided.

- Schedule: original subagreement duration, in days; original subagreement completion date; number of days of approved time extensions; current total days of approved subagreement duration (including extensions); approved subagreement completion date; days elapsed to date; percentage of subagreement time expended.

- Financial Impacts: the contractor should report any issues pending or identified in the last reporting period that may affect the subagreement amount. This includes any pending change orders or potential claims. The contractor should discuss the nature of the problems, proposed actions for resolution or mitigation, and their eligibility for compensation under the State's Cooperative Agreement.

- Affect on Progress: the contractor should identify any activities that have fallen behind schedule or any problems observed or expected that may delay timely subagreement completion. The contractor should discuss the nature of the problems reported, proposed actions for their resolution or mitigation, and their eligibility for compensation under the State's Cooperative Agreement.

Monthly progress reports should contain the specific information in the sample presented in Exhibit VI-1, on the following page.

Contractor reports should form the basis of States' quarterly reports to EPA required by the Cooperative Agreement. States may wish to include copies of contractors' monthly reports as addenda to State quarterly reports to EPA. This is particularly appropriate for complex remedial planning or action projects or when a problem on a project, which will significantly affect project cost or progress, exists or arises. The State should not wait until the next quarterly report to inform EPA of significant changes in project cost or work progress, but should do so immediately.

EXHIBIT VI-1
SAMPLE MONTHLY PROGRESS REPORT

EPA Project No. ____________________ Report Date _______________

Project Title ____
Subagreement No. ____
Contractor ____

Project Phase ____ RI/FS ____ Design ____ Constructability/Biddability
(Subagreement) ____ Bid ____ Construction ____ O&M _______________
(OTHER)

Services Offered ____

Reporting Period From: _______________ To: _______________

CASH FLOW		SCHEDULE
A. Original Subagreement Amount	$ ________	A. Original Subagreement Duration ____ days
B. Approved Change Orders	$ ________	B. Original Subagreement Completion Date ________
C. Current Total	$ ________	C. Approved Time Extensions ____ days
D. Cumulative Payments to Date	$ ________	D. Approved Subagreements Duration ____ days
E. Percent of Current Subagreement Amount Paid	________%	E. Approved Subagreement Completion Date ______________
F. Estimate of Percent Work Complete	________%	F. Duration to Date ____ days
(Explain Variance Between E & F Below)		G. Percent of Time Expended ____%

FINANCIAL IMPACTS

(e.g., Pending Change Orders - Amounts & Eligibility & Possible Claims)

____
____

AFFECTS ON PROGRESS

(e.g., Activities Behind Schedule & Observed Problems)

____
____
____

(Additional Comments on Back) ________________________________
Contractor's Project Manager

The State's quarterly reports to EPA will help EPA to monitor the progress and conduct of the remedial activity. The content of these reports must be sufficient to present a chronological record of all site work and should include the following elements:

- An estimate of the percentage of the project completed and the total project cost to date
- Summaries of the following items for the reporting period:
    - Work performed on the site
    - Community relations activities including community contacts, citizen concerns, and efforts to resolve any concerns
    - Summary of change orders made to the subagreement to date and their total costs, and technical and administrative analyses to document the need for such changes (see Section C.3 of this chapter)
    - Problems or potential problems encountered
- Status of the contingency fund to date (amount used and the amount remaining)
- Projected work for the next reporting period.

The report may include other elements, as necessary and appropriate.

C. CHANGE ORDER ADMINISTRATION

A change order is a written order issued by the State or its designated agent to its contractor authorizing an addition to, deletion from, or revision of a subagreement for either engineering services or construction. A change order is issued after execution of the subagreement to modify, within the scope of the project, the subagreement cost or scope of work; to interrupt or terminate the project; to revise the completion date; or, in general, to implement any deviation from the original subagreement terms and conditions. Change orders may occur during any phase of remedial response, but are most likely to arise during construction, when there is a greater chance of encountering unforeseen site condition, changes in estimated quantities, and other potential project delays.

Proper change order management is a key element to avoiding delays in remedial response, increased costs, and potential contractor claims. During remedial action, States may manage construction subagreements directly, may authorize the architectural/engineering (A/E) firm to do so, or may secure the services of an independent construction oversight firm. EPA also will consider funding, as part of the Cooperative Agreement with the State, the services of a firm specializing in change order management. For the Superfund program to date, the design engineering firm frequently has provided construction oversight services. Administrative requirements for management of change orders, including timing, form, and provisions for construction subagreement adjustments, appear in the model subagreement clauses of 40 CFR 33.1030. This section outlines change order procedures specific to the Superfund program.

C.1 Conditions That Warrant a Change Order

Change orders may be required for the following conditions:

- Differing site conditions, such as:
    - Subsurface or latent physical conditions at the site differing materially from those indicated in the subagreement
    - Unknown physical conditions at the site, conditions of an unusual nature, or conditions differing materially from those ordinarily encountered and generally recognized as inherent to work of the type provided for in the subagreement.
- Errors and omissions in plans and specifications; errors are items that are described incorrectly in the plans or specifications, whereas omissions are items that are neither shown nor specified.
- Changes instituted by modifications of regulatory requirements, such as:
    - Changes in requirements for protecting historical or archeological objects
    - Revisions to building codes
    - Revisions to zoning and land use plans

  - Revisions to Federal regulations and policies
  - New congressional legislation.

- Design changes, such as modifications to the existing design which will offer a savings in excess of all costs associated with the change order, including future operation and maintenance costs.

- Overruns/underruns in quantities.

- Factors affecting time of completion, such as:

  - Temporary suspension of work
  - Directed acceleration
  - Time extension for delay beyond the contractor's control
  - Constructive acceleration.

- Changes in subagreement administration procedures, such as:

  - Progress payment terms
  - Retainage release
  - Occupancy
  - Testing
  - Acceptance
  - Warranties.

- Resolution of claims.

- Emergency conditions, such as acts of God or civil disturbance.

Design changes usually originate as proposals volunteered by the construction contractor, recommended by the engineer, or requested by the State. Overruns or underruns in quantities occur only in subagreements that are formulated as a series of unit prices bid for each unit required (e.g., cubic yards of earth moved), and are developed when there is a difference between the quantities estimated in the bid schedule and the quantities actually required to complete the bid item.

C.2 Evaluating Change Order Requests

In reviewing a contractor's request for a change order, the State must evaluate the subagreement documents and the contractor's compliance with the subagreement requirements. A sample checklist for the State to use in evaluating change orders is presented in Exhibit VI-2, on the following page. If the request for a change order was the result of errors and/or omissions in the plans and specifications, the State must determine the nature of the error or omission, the pertinent references in the plans and specifications, the original intent of the references, and whether the error or omission led to increased contractor costs. At times, the need to comply with changes in laws or regulations may require the State to issue a change order. Similarly, the State should evaluate other requests for change orders such as design changes or underruns/overruns in quantities of materials.

Ultimate responsibility for administering change orders rests with the State. Specifically, the State is responsible for:

- Determining whether a subagreement change order is warranted, based on the terms of the existing subagreement and a review of the circumstances responsible for the alleged change
- Negotiating a fair and reasonable price for each required subagreement change
- Maintaining accurate and complete cost records for the change, including records of negotiation
- Adequately documenting, for future reference, a description of the agreed change and reason for this change
- Maintaining current and accurate fiscal projections of subagreement and project completion costs
- Executing subagreement change order documents efficiently and in a timely manner
- Resolving disputes that may arise as a result of a proposal for a change
- Notifying EPA in writing of events or proposed changes that may require a Cooperative Agreement amendment

EXHIBIT VI-2

SAMPLE CHECKLIST FOR STATE CHANGE ORDER APPROVAL

A. **SCREENING** - to determine whether the information and documentation provided are sufficient for detailed review. (If insufficient information is provided, the documentation should be returned to the contractor for additional information.)

1. **IDENTIFICATION**

   - Project Name
   - Subagreement Number
   - EPA Project Number
   - State Project Number
   - Change Order Number
   - Subagreement Date
   - Change Order Date
   - Name, address, and telephone number of contractor

2. **PRIOR APPROVAL**

   - Required from EPA
   - Obtained from EPA

3. **DESCRIPTION OF CHANGE**

   - Clear, unambiguous scope
   - Revised plan and specification sheets referenced and attached
   - Design data and calculations attached
   - Change is within project scope
   - Design is adequate (construction subagreements)
   - Increases/reduces time and/or cost of project
   - Affect on operation and maintenance costs

4. **REASON FOR CHANGE**

   - Clear, understandable statement
   - Cause of remedial change
   - Reason why not in original subagreement
   - References and attached substantiating documentation
   - Applicable subagreement provisions cited

5. **CHANGE TO SUBAGREEMENT PRICE**

   - Dollar amount of change shown (zero for no change)
   - Contractor's cost breakdown adequately documented
   - Profit entered separately
   - Independent estimate from State or its agent including verification of costs for new items
   - Documentation referenced, attached
   - Unit prices in accordance with subagreement documents and regulatory requirements
   - Arithmetic correct

6. **CHANGE TO SUBAGREEMENT TIME**

   - Statement of number of days (or zero days)
   - Documentation (schedule analysis) referenced and attached

7. **APPROVALS**

   - Proper approval signatures entered and dated

8. **ATTACHMENTS LISTED AND INCLUDED**

   - Memorandum of Negotiations
   - Cost and pricing data attached and certified by contractor
   - Change Order and Notice to Proceed

B. **DETAILED REVIEW** - for approval (or disapproval) of change order. After the recipient determines that a change order file is complete and in order, the State subjects the change order to a detailed evaluation and review. The result of this evaluation is a ruling to approve the change order, to deny the change order, or to deny the change order pending receipt of additional information.

- Assessing the impact of change orders on progress toward project completion and acting to mitigate resulting project delays.

To expedite State review and approval of change orders, contractors must:

- Adequately describe the reason for each change request
- Submit change order proposals in accordance with the procedures set forth in the subagreement documents and enter into meaningful negotiations on a necessary subagreement change
- Furnish and certify the accuracy and completeness of cost and pricing data to allow the State to determine the necessity and reasonableness of the cost proposed, and to enable EPA to determine the eligibility and allowability of the extra work performed at the cost proposed.

Project delays and disputes resulting from change orders can be limited by effective and frequent communication between States and contractors. When a request for a change order is submitted, the State should request and obtain from the contractor a detailed proposal containing a thorough description of, and outlining reasons for, the change, and a detailed explanation of claimed extra costs. The change order request also must reference the original subagreement documents and must explain the specific circumstances associated with the change.

When the State receives a change order request, it must promptly investigate the circumstances for the request, reach a decision on the merits of the change, and notify the contractor of that decision. All negotiated change orders must have a State-conducted cost analysis (40 CFR 33.290(a) and Chapter II of this manual).

Upon reaching agreement with a contractor on the description and cost of each change order, the State should promptly execute a change order document which modifies the base subagreement to include agreements reached.

C.3 Superfund Requirements for Change Order Management

To ensure that adequate change order funds are available during the remedial action, the Cooperative Agreement funding the action will include a construction contingency. This contingency fund usually is expressed as a percentage of the total project costs, and is usually in the range of eight to ten percent. (For additional guidance on estimating construction costs and contigencies, see the appropriate Superfund guidance document referenced in Appendix D.

The State, under the terms of the Cooperative Agreement, may be delegated the authority to approve any change order which totals up to 20 percent of the project contingency fund. Any change order that exceeds this 20 percent limit requires EPA approval. The State may continue to approve such change orders until 75 percent of the total contingency fund has been depleted. Thereafter, the State must request EPA to provide additional funds through an amendment to the Cooperative Agreement; this amendment is not required, however, if the project is near completion and no additional change orders are anticipated. Depending upon the circumstances, the Region may award funds from its Superfund Comprehensive Accomplishments Plan (SCAP) contingency, may request funds from the Headquarters SCAP contingency fund, or may request that the Regional SCAP be amended to add new funds for this purpose. In any case, the State must receive written approval from EPA to exceed 75 percent of the project contingency fund. A special condition regarding the drawdown of the construction contingency fund is routinely included in Cooperative Agreements funding construction activities. (See the State Participation in the Superfund Program manual.)

The EPA will monitor closely the expenditure of the contingency fund to compare the remaining construction contingency fund against the change orders to date and the progress of the project, determining whether funds will be sufficient to complete the project. Assistance is available from the COE for this purpose. If it appears that these funds will be exhausted before the project is completed, the EPA Regional Office should seek additional money either by requesting the funds from the Headquarters SCAP contingency fund or by preparing an estimate of costs for the following fiscal year's SCAP budget.

Before any change order may be approved, the State must conduct a cost or price analysis (see 40 CFR 33.290). Superfund program procedures also require the State to perform a technical and administrative analysis to determine:

- The technical accuracy of the alleged differences in quantities and technical requirements
- The allowability of the proposed amounts
- Compliance with contractual and regulatory requirements
- Conformance with the approved Cooperative Agreement statement of work (SOW).

The State should forward its analysis to EPA with its quarterly report and with any requests to (1) exceed 20 percent of the construction contingency fund for an individual request, (2) exceed 75 percent of the construction contingency for the total of all requests to date, and/or (3) amend the Cooperative Agreement to add funds. EPA will take this analysis into consideration when reviewing the State's performance in managing the contract to determine the allowability of costs under the Cooperative Agreement.

C.4 Change Orders Requiring Amendments to the Superfund Cooperative Agreement

States may rebudget existing subagreement funds in the Cooperative Agreement to pay for necessary changes (see 40 CFR 30.700 for limitations on rebudgeting). State approval of a change order, however, does not obligate EPA to increase the amount of a Cooperative Agreement.

If EPA determines that a necessary change is substantial and is within the scope of the project, the State must request EPA to execute a formal amendment to the Cooperative Agreement (40 CFR 30.700(d)). Change orders requiring amendment of the Cooperative Agreement include:

- Significantly changed site conditions, to the extent that project costs are significantly affected
- Changes increasing or decreasing the funds needed to complete the project
- Significant delay or acceleration of the project schedule
- Changes to the approved remedy.

These are the most common situations that necessitate a change order; however, additional circumstances also may require such an action.

In determining whether to approve a major change to a subagreement, States must first ascertain whether it is a cardinal change. A cardinal change is one in which (1) the altered subagreement attempts to purchase an item essentially different from the one originally called for, or (2) the cost of the changed subagreement greatly exceeds the original subagreement cost. Such a change may be unfair to other potential contractors because they may have had no opportunity to compete for the subagreement; this is a violation of EPA regulations requiring competition on all procurement of supplies and services. Although it may appear that the State should terminate the subagreement and rebid the remaining work, including the change, under a new subagreement, such a decision should not be made at a site on the National Priorities List (NPL) without first consulting EPA.

C.5 Preparation of the Change Order

After evaluating the change order request and arranging for payment for the extra work, the State must prepare and issue a change order. To do so, the State should develop a formal, written document that contains the following elements:

- Identification of the change
- Description of the change
- Reason for the change
- Difference in the unit price, if applicable
- Difference in the subagreement price
- Alteration of the subagreement schedule, if applicable
- Effect of the change on other work elements
- State and contractor approval of the change order.

If necessary, the change order also should provide for EPA review and comment.

D. CLAIMS

Claims consist of demands or written assertions by a contractor seeking, as a matter of right, changes to the subagreement (e.g., additional time and/or costs) which the State has originally rejected through the change order process. Claims may arise at any phase of remedial response. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim. Such a submission, however, may be converted to a claim if it is disputed as to liability or amount.

State failure to prevent or successfully resolve contractor claims in a timely manner may greatly increase project costs with no corresponding benefit. This is of particular importance to States because EPA may not participate in certain costs associated with contractor claims. When EPA does, the share is the same as for remedial action (either 90/10 or 50/50). States must institute a vigorous program for claims prevention and, in those cases where claims cannot be prevented, must take action to ensure timely and effective claims resolution.

D.1 Causes of Claims

States may encounter claims in subagreements for services, supplies, or construction, even when the project has been conducted in a thoroughly satisfactory manner. Claims may result from the contractor asserting the following:

- Defects in plans or specifications
- Differing site conditions
- Inadequate construction inspection and management
- Failure to address contractor grievances promptly and fairly, requests for time extensions, or other problems
- Failure to enforce subagreement provisions on scheduling and completion time
- Failure to negotiate time extensions and/or delay costs, if any, associated with change orders
- Failure to mitigate effects of delay
- Unusually severe weather conditions
- Strikes
- Acts of God
- A State decision to stop or suspend work or to otherwise prevent the contractor from completing work according to a previously approved schedule, for reasons beyond the control of the contractor, and not the fault or due to the negligence of the contractor

- Subagreement termination for reasons beyond the control of the contractor, and not the fault or due to the negligence of the contractor

- Failure to make payment according to the terms of the subagreement; examples include:

  - Making arbitrary, unsubstantiated reductions in progress payments at substantial or final completion of the project

  - Making partial payments that, in addition to failing to comply with the subagreement, affect the contractor's ability to make legitimate payments to subcontractors, materials suppliers, and equipment vendors

  - Failure to release retainage

  - Delay in actual disbursement of approved payments beyond the normally accepted industry standard.

States should take every reasonable action to make prompt payment on all subagreements, since, according to State law or their subagreements, contractors may be entitled to interest on earned but unpaid monies. Such interest payments are not allowable costs under the Cooperative Agreement and will have to be fully borne by the State.

D.2 Claims Prevention

It is critical that all subagreement documents that States prepare include precise language on requirements for administering changes in the SOW. Many claims can be avoided if acceptable change order language is used to resolve disputes between the contracting parties that arise during the course of the work. States can reduce the probability of receiving claims, to the maximum extent possible, by avoiding initiating changes in the work. Changes should be directed only if they are essential to successful completion of the subagreement; if the expected costs of a proposed change, including indirect effect and delay costs, are less than the expected costs of authorizing no change in the work; or if there is no feasible alternative to performing the proposed extra work (e.g., awarding a separate subagreement for the proposed extra work at a future date).

To avoid significant cost and schedule increases, EPA strongly encourages the State to exercise effective project management practices that will reduce the occurrence of claims. The State must ensure that such practices are employed throughout the project cycle. Although the State may retain the services of other parties for certain management tasks, the State is fully responsible for the satisfactory completion of the work. Therefore, the State must require any contractors for construction management services to give immediate notice of any and all unresolved change orders and disputes.

Some elements of effective project management which will help prevent claims include:

- Recognizing the importance of scheduling as a key management tool by specifying that the contractor provide a realistic and adequate project schedule commensurate with the complexity of the project; enforcing the schedule provisions; and requiring periodic updates to show the adjusted project progress and completion date
- Maintaining a fully and completely documented record of all aspects of the work, such as photographs and a daily log of work progress, personnel, and equipment on-site
- Demonstrating a knowledge and understanding of common sources of disputes and of situations likely to result in claims during construction, and exercising effective techniques to avoid such situations
- Providing timely responses to contractor requests for direction, clarification, and adjustment
- Instituting measures to ensure accurate and complete plans and specifications (e.g., biddability/constructability reviews) and holding pre-bid conferences
- Maintaining open and effective communication with all contractors throughout the course of the remedial activities.

EPA, as a routine aspect of Cooperative Agreement management, will consider funding State costs incurred in implementing these practices.

D.3 Types of Claims

States must recognize that any action that changes the subagreement scope or schedule increases the likelihood of claims. Several types of claims are relevant to this chapter and are discussed below. These include:

- Constructive changes
- Defective specifications
- Inconsistent administration of warranty provisions
- Impossibility of performance
- Acceleration
- Delay.

States also should be aware that they cannot order a change that is beyond the scope of the subagreement, known as a cardinal change, without EPA review and approval. The contractor is not bound to perform a cardinal change unless the subagreement for remedial work is formally revised.

Changes resulting from written or oral orders not designated as change orders are known as constructive changes. Any such order that causes a change, whether or not designated a change order by the State, can be treated as a change order by the contractor after giving proper notice of its intent to seek additional compensation under the change order provisions. Claims often arise when constructive changes are directed in the work but the State does not recognize or authorize a change order. A contractor can assert that a constructive change has been directed if work performed according to subagreement terms is not accepted by the State; claims can thus result.

Defective specifications, also known as errors and omissions, can result in claims if the contractor incurs additional costs that are not reimbursed by change order. The contractor is liable for all damages caused by contractor negligence or unacceptable performance of work under the contract, except for errors, omissions, or other deficiencies attributable to the subagreement documents or to another party. The contractor, therefore, is responsible for correcting or revising any errors, omissions, or other deficiencies on his/her part, without being provided compensation.

If States administer any warranty provisions of subagreements in a manner inconsistent with subagreement terms, claims may arise.

Claims may result from an impossibility of performance if restrictive subagreement language results in a situation where it is impossible for the contractor to complete the work and the problem cannot be resolved by issuing a change order.

If States require subagreement work to be completed on a schedule of shorter duration than originally agreed upon in the contract documents, or if significant change order work is directed to be completed within the original project schedule, additional costs will accrue to the contractor. This is known as acceleration of work and a claim may develop if additional compensation is not paid to the contractor by change order.

When contractors are delayed in the completion of their work for reasons that are beyond their control and not brought about through their own fault or negligence, it is reasonable to extend the subagreement by a period of time equivalent to the delay. Failure to recognize and accommodate effects on the contractor's progress may result in claims.

D.4 Claims Resolution

When claims arise, States should implement a fair and timely claims negotiation process in order to avoid lengthy and costly arbitration and/or litigation. In general, States should develop a thorough assessment process to evaluate the merits of claims filed with the State and the relative vulnerabilities of the parties involved.

In pricing a claim, contractors may submit:

- Unit prices
- A lump-sum proposal
- Cost plus fee, including labor, materials, equipment, travel and subsistence, job site overhead, home office overhead, and interest on claimed costs unpaid (the State is required to pay reasonable interest, but EPA is prohibited from sharing in these costs under CERCLA Cooperative Agreements).

Claims for delay may be quantified in terms of:

- Labor cost escalation
- Materials cost escalation
- Idle labor and equipment
- Extended overhead
- Availability charges.

In resolving claims, States should review contractor proposals for adequacy and completeness, in the same manner as detailed previously for change orders, to determine whether the claim is reasonable.

Due to the complexity of issues usually involved in contractor claims, States may choose to engage the services of consultants specializing in claims management. This is an allowable cost under a Cooperative Agreement. The State must submit to EPA a request for funding claims management, however, before it expends funds for that purpose.

D.5 Funding of Claims Resolution

The State may request EPA to amend its Cooperative Agreement to fund a portion of the legal, technical, and administrative costs that the State incurs in analyzing the merits of claims and the costs associated with negotiating settlements of, or defending itself against, these claims. (Costs associated with analyzing a claim prior to litigation are considered to be part of negotiation costs.) For these costs to be eligible under the Cooperative Agreement, the claim must arise from work within the scope of the Agreement; the costs must not be incurred to prepare documentation that the claiming contractor developed to support the claim against the State; and the Award Official must determine that there is significant Federal interest in the issues of the claim.

A formal amendment to the Cooperative Agreement, specifically covering the claims defense costs, must be executed before such costs can be incurred. To obtain an amendment, the State must request the Award Official to provide funding for claims negotiation and defense prior to expending any money to resolve the claim(s). This request should include a schedule, budget, and scope of work required for claims management. EPA will review the documents that the State provides and will assess whether the claims resulted from poor project management by the State or from other factors beyond the control of the State or its contractor. This determination is the basis for EPA's decision whether to fund claims negotiation and defense costs.

If EPA decides to use Superfund monies for this purpose, the EPA Regional Office must determine whether funds are available in the Regional allowance to award an amendment to the Cooperative Agreement. The Regional SCAP contingency fund may be used to fund claims negotiation and defense costs associated with remedial planning. For claims negotiation and defense costs associated with remedial action, the Region may request funds from the Headquarters SCAP contingency fund. If possible, the EPA Region may choose to include these costs in the following fiscal year's SCAP budget.

D.6 Claims Negotiation

If EPA decides to fund the costs of claims negotiation or defense, it will execute a formal amendment to the

Cooperative Agreement. Claims negotiation or defense may commence upon execution of the amendment. If the State begins any negotiation or defense before the amendment is executed, the associated costs will not be eligible for reimbursement by EPA. In addition, EPA may decide against the State's application for the costs of claims negotiation or defense; such a ruling would make the State accountable for all such costs.

Because a claim can be a large potential liability, States must take full control of the situation using their legal and technical staffs to provide advice and assistance, enabling the State to mount a well-organized, thoroughly prepared resolution effort. The following suggested actions will aid the State in resolving claims:

- Take immediate steps to mitigate further costs being incurred by the contractor, or by any other party, due to the claims issue(s)
- Perform a timely, complete, and thorough review of the issues raised by the claim to determine the degree of merit that each issue may have
- Negotiate with the contractor on the issues in a good faith attempt to resolve each issue
- Make a renewed effort to negotiate a fair and reasonable settlement of the meritorious issues and a reduction or elimination of the issues found to be without merit
- Maintain a full and completely documented record of the claim negotiation process
- Provide a high degree of attention to dispute resolution (40 CFR 33.1030, clause 7).

During the claim(s) resolution process, the State may choose to consult the EPA Region for technical and legal advice. Because the State is responsible for paying all meritorious contractor claims, EPA must carefully evaluate the extent of EPA's interest in awarding to the State the costs of negotiating or defending against claims.

D.7 Settlement of Claims

Should the State decide that the contractor's claim is meritorious and thus negotiate a settlement, the State may request EPA to amend its Cooperative Agreement to fund the settlement. The costs of meritorious claims are allowable for an increase to the Cooperative Agreement, provided that the costs are within the scope of the project; are not caused by the State's mismanagement; and are not caused by the State's vicarious liability for the improper actions of others. Should the State wish to exercise this option, the Region must determine whether the costs associated with the claim are: (1) allowable (40 CFR 30.200), (2) within the scope of work agreed upon, and (3) consistent with the Record of Decision (ROD). Claims that alter the cost-effectiveness analysis and selection of the remedy may require EPA to prepare a supplemental ROD. Approval of such a supplemental ROD must precede award of funds for a Cooperative Agreement amendment.

To secure EPA review, the State should submit its claims settlement proposal to the EPA Region. The EPA Regional Office, with the assistance of Regional Counsel, then will review the proposal from several aspects:

- Technical accuracy of the alleged differences in quantities and technical requirements
- Allowability of the proposed amounts
- Compliance with contractual, regulatory, and statutory requirements, including the timeliness and format of the contractor's change order request
- Conformance with the approved Cooperative Agreement SOW
- State performance in managing the contractor; any costs incurred due to failure to properly manage the contractor are not allowable under the Cooperative Agreement.

This review should determine the reasonableness of the proposed settlement and the allowability of the costs under the Cooperative Agreement. EPA may request technical assistance from the COE or EPA's own remedial contractor to conduct this review. EPA review and concurrence is not necessary for the settlement itself; however, the review will determine whether money should be added to the Cooperative Agreement for claims settlement.

If it is determined that EPA will fund the claim, the EPA Regional Office must evaluate the availability of necessary funds in the Region's SCAP. If allowable claims are associated with remedial planning, the Region may choose to use its SCAP contingency. For claims resulting from remedial action, the Region may request funds from the Headquarters contingency fund. If possible, the EPA Regional Office may include the funds for such claims in the following fiscal year's SCAP budget.

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This document, Procurement Under Superfund Remedial Cooperative Agreements, has provided guidance on various aspects of a State procurement program. Subjects addressed include regulatory requirements, procurement of engineering services, types of engineering services provided during remedial response, procurement of construction contractors, and subagreement administration. Definitions of terms used in this manual and additional references may be found in the appendices which follow.

APPENDICES

APPENDIX A

TWO-STEP FORMAL ADVERTISING

The Agency's regulation governing procurement under Superfund Cooperative Agreements with the States, 40 CFR Part 33, requires the use of the formal advertising method for procurement of construction subagreements. The traditional formal advertising method requires a complete, adequate and realistic specification. That is, both the technical requirements and the means of satisfying those requirements can be specified.

As the Superfund program moves into the use of complex, innovative and alternative technologies, a method of procurement other than traditional formal advertising may be appropriate. An acceptable method is "two-step formal advertising." The two-step method may be used when it is possible to prepare a performance-based specification to describe the requirements but impractical initially to prepare detailed specifications to support an award based on price.

Two-step formal advertising is a method of contracting designed to obtain the benefits of formal advertising when adequate specifications are not available. An objective is to permit the development of a sufficiently descriptive and not unduly restrictive statement of the recipients's requirements, including an adequate technical data package, so that subsequent procurements may be made by conventional formal advertising. This method is especially useful in procurements requiring technical proposals, particularly those for complex projects. This appendix describes both when the two-step formal advertising procurement method may be used and the procedures for implementing it.

A. APPROPRIATE USE OF TWO-STEP FORMAL ADVERTISING

The two-step formal advertising method may be used when:

- Complete, adequate and realistic specifications are not available without technical evaluation or may be too restrictive to permit full and free competition
- Definite criteria exist for evaluating technical proposals
- More than one technically qualified source is expected to be available

- A fixed-price subagreement will be used.

By utilizing two-step formal advertising in these situations, the use of formal advertising may be possible in future procurements.

B. PROCEDURES FOR USING TWO-STEP FORMAL ADVERTISING

The procedures for implementing two-step formal advertising consist of two steps. The first step is to solicit a "Request for Technical Proposals" requiring the submission of an unpriced description of what the bidder will offer to meet the performance specifications. Each offer is then reviewed, possibly discussed with the offeror, and evaluated. The second step is an "invitation for bids" requesting prices from those bidders whose proposals have been determined to be technically acceptable under the criteria set forth in the first solicitation. Each of these steps is described in more detail below.

Step one consists of the request for, submission, evaluation, and (if necessary) discussion of a technical proposal. No pricing is involved. The objective is to determine the acceptability of the offer. In this context, the word "technical" has a broad connotation and includes, among other things, the engineering approach and special testing techniques. This step is the appropriate time for bidders to clarify questions relating to technical requirements of the project. Implementation of step one requires the following activities:

- Preparing a public notice and solicit a request for technical proposals.
- Including in the request:
    - A statement of the intent to use the two-step formal advertising method
    - Description of the work required
    - The requirements of the technical proposal
    - The criteria and relative weight of each for evaluating technical proposals
    - A statement that the technical proposals shall not include prices or pricing information.
    - The date and hour by which the proposals must be submitted

- A statement that only those offerors whose technical proposals are acceptable either initially or as a result of discussions will be considered
- A statement that:

  (1) a. The recipient may make a final determination regarding the proposal's acceptability solely on the basis of the proposal as submitted; and

  b. May proceed with the second step without requesting further information from any offeror; or

  (2) The recipient may request additional information from offerors
- A statement that offerors with unacceptable proposals will be notified
- A statement whether offerors may submit more than one technical proposal
- Any other information on requirements for performing the work that may assist offerors in determining whether to submit a proposal.

. Upon receipt of proposals, the recipient must:

- Remove any reference to cost or price, and
- Safeguard the proposals from unauthorized disclosure.

. Setting a deadline for offerors to submit additional information.

. Setting a deadline for completing the evaluation of proposals.

. Evaluating the proposals based on the criteria stated in the request. Categorize proposals as: acceptable, unacceptable or reasonably susceptible of being made acceptable if clarifying or supplementing information was requested.

. Proceeding with step two if there are sufficient acceptable proposals to ensure adequate price competition, or request offerors whose proposals were categorized as "reasonably susceptible of being made acceptable" to submit additional clarifying or supplementing information. (Identify the nature of the deficiencies in the proposal or the nature of the additional information required and arrange discussions if necessary.)

- Notifying offerors of proposals that are determined unacceptable and the basis for that determination.

Once the technical proposals are obtained and evaluated, cost issues can be addressed.

Step two involves the submission of sealed bids by those who submitted acceptable technical proposals in step one. Bids submitted in step two are evaluated and the awards made in accordance with 40 CFR 33.430. In step two the procedures for formal advertising are followed except that:

- Invitations for bids are issued only to those offerors submitting acceptable technical proposals in step one; and
- The invitation for bids prominently states that the bidder shall comply with the specifications and the bidder's technical proposal.

By following these steps and utilizing two-step formal advertising when appropriate, it may be possible to use the traditional formal advertising method for future procurements at the site.

APPENDIX B

REPORTING OF MINORITY BUSINESS UNDER SUPERFUND ACTIVITIES

As part of the Agency's Superfund report to Congress, as required by CERCLA section 301(h)(1), the Agency is required to report annually not only the awards executed during the calendar year, but also what efforts it has made to encourage or promote minority business participation. In particular, section 105(f) of CERCLA, as amended by SARA, requires annual reporting on use of minority contractors. This requirement states that "...In awarding contracts under this Act, the President shall consider the availability of qualified minority firms...as part of the annual report submitted...under this Act, the participation of minority firms in contracts carried out under this Act. Such report shall contain a brief description of the contracts which have been awarded to minority firms under this Act and of efforts made...to encourage the participation of such firms in programs carried out under this Act."

To comply with this statutory requirement, EPA requires that all State agencies receiving Superfund monies must complete the Department of Commerce Standard Form 334, "MBE/WBE Utilization Under Federal Grants, Cooperative Agreements, and Other Financial Assistance." These reports must be filed on a quarterly basis through the Regional MBE/WBE Coordinator for consolidation and subsequent transmittal to Headquarters, Office of Small and Disadvantaged Business Utilization (OSDBU)-(A-149C).

Superfund reporting is on a calendar-year basis and not on a Federal fiscal year. Because of this, the Regions must provide special instructions to the States to assure that States fully recognize the standard reporting system currently in place must continue in force, including any Superfund activity, so that the Agency may report such data to the U.S. Department of Commerce. Additionally, a second report on Superfund activities is required on a calendar year basis, i.e., January 1 to December 31, for the Agency's report to Congress.

A second part of the annual report requires the Agency to report on the efforts made to encourage participation of minority firms in the Superfund program. Consequently, each Region must, in narrative form, describe the actions it has taken, (for example, seminars or procurement conferences, counseling and outreach efforts etc.) to encourage the participation and utilization of minority firms. These activities and reports are a critical element in the Agency's minority business "fair share" policy and are carefully reviewed.

APPENDIX C

RETAINING ARCHITECTURAL/ENGINEERING FIRMS FOR FOLLOW-ON REMEDIAL RESPONSE ACTIVITIES

In many cases, recipients of Superfund Cooperative Agreements want to retain the architectural and engineering (A/E) firm that provided services during the remedial investigation (RI)/feasibility study (FS) phase to perform follow-on activities during the construction phase of remedial action. The Agency's procurement regulations that apply to Superfund Cooperative Agreements with the States, 40 CFR Part 33, require recipients to readvertise and reevaluate subagreement awards and to follow the public notice and evaulation requirements in 40 CFR 33.510 and 33.515 for competitively negotiated subagreements whenever:

- The initial subagreement did not include the subsequent A/E services for the construction phase
- State policies do not permit procurement for activities where funding is not guaranteed.

States may, however, be granted an individual deviation from this requirement by the Director of the Grants Administration Division.

To permit timely and cost-effective response at Superfund sites, the Agency approved a class deviation to permit States to use the A/E firm procured to conduct any or all of the RI, FS, or design to perform follow-on RI, FS, design, or engineering activities without subsequently going through the public notice and evaluation procedures in 40 CFR 33.510 and 33.515. Recipients of Superfund Cooperative Agreements must, however, comply with all other requirements in Part 33 when awarding the follow-on subagreements and must have followed all of the requirements in Part 33 (including the public notice and evaluation required in 40 CFR 33.510 and 33.515) for the initial procurement of the A/E firm, or EPA must have conducted the initial procurement.

This class deviation is documented in a memorandum issued on November 18, 1983 by the Grants Administration Division to EPA Regional Administrators on "Class Deviation from 40 CFR 33.510 and 33.515 for Certain Activities Conducted Under the Authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980." (also 48 Federal Register 56044, December 19, 1983) This class deviation applies in the following cases:

- Where the recipient conducted the RI/and/or FS activities without EPA assistance but is using EPA funds for follow-on activities. The recipient may use the A/E firm for subsequent work, provided that the recipient attests that:

  - It complied with the following requirements when it selected the A/E firm:

    - Section 33.230 "Competition,"

    - Section 33.250(a)(1), (a)(2) (a)(3), and (b) "Documentation,"

    - Sections 33.505 through 33.525 "Competitive negotiation,"

  - It complied with the following conditions:

    - No employee, officer, or agent of the recipient, any member of their immediate families, or their partners have financial or other interest in the firm selected for award; and

    - None of the recipient's officers, employees, or agents solicited or accepted gratuities, favors, or anything of monetary value from contractors or other parties to subagreements.

  - If the recipient uses the procedures in this paragraph to retain an architect or engineer, any EPA-funded subagreement between the A/E firm and the recipient must meet all of the other provisions in Part 33.

- Where the recipient conducted the RI, FS, or design activities with EPA assistance but the original subagreement did not include the follow-on activities and the recipient wishes to use the same A/E for follow-on Superfund remedial activities, the recipient does not have to follow the public notice and evaluation requirements in 33.510 and 33.515 for subsequent activities provided that the recipient follows the rest of the procedures in 40 CFR Part 33.

- Where EPA conducted the RI, FS, or design activities under a direct procurement contract but the recipient will assume the responsibility for subsequent phases of remedial response under a Cooperative Agreement, the recipient may use, with EPA's approval, EPA's A/E contractor without further public notice or evaluation, provided that the recipient follows the rest of the Part 33 requirements to award the subagreement.

- Where the recipient awards a subagreement after the effective date of this class deviation, the initial request for proposals or bid solicitations must clearly state the possibility that the firm or individual selected could be awarded a subagreement for follow-on services.

This class deviation saves time by eliminating the requirement for separate procurement actions between the various activities in the remedial action process and provides continuity in A/E services. In addition, the time required to conduct subsequent activites is reduced, since the A/E firm is familair with the site conditions and will have had the opportunity to develop any specific expertise required to deal with the problems. This deviation does not unduly restrict open and free competition, because States are required to ensure adequate competition for the initial procurement of A/E firms.

APPENDIX D

GLOSSARY OF TERMS

This appendix provides definitions of selected terms used throughout the text. It is not intended to be comprehensive in nature; rather, it attempts to highlight some of the terms commonly used in the Superfund remedial program. Statutory definitions have been quoted for those terms defined in CERCLA while other definitions have been taken from appropriate EPA regulations, guidance, and publications.

Activity: A set of tasks that comprise a segment of the sequence of events undertaken in determining, planning, and conducting a response to a release or potential release of a hazardous substance. For accounting purposes, five activities have been defined:

- Pre-remedial Activities
- Remedial Investigation/Feasiblity Study
- Remedial Design
- Remedial Action
- Operation and Maintenance.

Allowable Costs: Those project costs that are eligible, reasonable, necessary, and allocable to the project; are permitted by the appropriate Federal cost principles; and are approved by EPA in the assistance agreement.

Amendment: A written revision to, or an expansion of, terms included under a Cooperative Agreement, Memorandum of Understanding, or Superfund State Contract signed by both the Award Official and an authorized representative of the State; other Federal-lead remedial response agreements do not require formal amendments. An amendment is necessary when the scope or dollar amount of an agreement is significantly changed (see 40 CFR 30.200 for other situations which require amendments). The original agreement should define situations in which amendments must be negotiated.

"As-Built" Construction Schedule: The "as-built" construction schedule provides the actual initiation and completion dates of all tasks performed throughout the duration of a construction project. This is compared to the planned schedule to evalute the effects of delays or accelerations on task completions.

Award Official: The EPA official delegated the authority to execute assistance agreements (grant or Cooperative

Agreement) on behalf of the Federal government. This is the Regional Administrator for Regional Cooperative Agreements; the Chief, Grants Operations Branch is the Award Official for Headquarters Cooperative Agreements that have not been delegated to the Regions.

Biddability/Constructability: Determination of the ability of a construction contractor to prepare a fair and reasonable bid based upon the remedial design and specifications, and then to construct the project using currently accepted construction practices and techniques without submitting change orders or claims.

Bid Protest: A written complaint filed by a party or parties with a direct financial interest affected by a procurement action.

Bond: An agreement pledging surety for financial loss caused by an act or default of the bonded party or by some contingency.

CERCLA: The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 was enacted by Congress to provide for liability, compensation, cleanup, and emergency response for hazardous substances released into the environment and the cleanup of inactive hazardous waste disposal sites. It also is known as Superfund since the act established a trust fund (Hazardous Substance Response Fund) to financially support cleanup activities.

Change Order: A written order issued by a State, or its designated agent, to its contractor authorizing an addition to, deletion from, or revision of, a subagreement, usually initiated at the contractor's request.

Claim: A demand or written assertion by a contractor seeking, as a matter of right, changes in subagreement duration, costs, etc., which originally have been rejected by the State. Claims usually are filed after the completion of a subagreement.

Contract: The term used to describe a variety of agreements or orders to acquire supplies or services for the direct benefit of EPA (see "Subagreement").

Contractor: Any party to whom a recipient awards a subagreement.

Cooperative Agreement (CA): An assistance agreement whereby EPA transfers money, property, services, or anything of value to a State for the accomplishment of certain remedial activities or tasks, as authorized by

CERCLA. It assumes a substantial Federal involvement in the State's performance of these activities. The remedial Cooperative Agreement provides general information about the project, such as the approved budget, and any specific conditions applicable to the project. It also documents any required CERCLA section 104(c)(3) assurances.

Cost Analysis: The review and evaluation of each element of subagreement cost to determine reasonableness, allocability, and allowability.

Cost Share: The portion of allowable project costs that the State contributes toward completing its project using non-Federal funds. The cost share may include services as well as cash contributions. (Sometimes referred to as "non-Federal share" or "matching share.")

Debarment: An action taken by the Director, Grants Administration Division under 40 CFR 32.206 to deny an individual, organization, or unit of government the opportunity to participate in EPA assistance or to receive subagreements.

Deletion: The procedure by which a site is removed from the National Priorities List (NPL). A final technical report is submitted by the State documenting that the criteria established in the feasibility study and Record of Decision for the site cleanup have been met, and that the remedy is performing adequately. This final technical report is used to determine whether the hazard associated with the site has been reduced or eliminated to a degree allowing its removal from the NPL.

Deviation: Official EPA permission to differ on a certain, specific point of regulation. EPA may issue a deviation from any of its assistance-related regulations, except for those that implement statutory and executive order requirements. A deviation request may be made by the State or by an EPA program office and must comply with the requirements set forth in 40 CFR 30.1003. The Director, Grants Administration Division, in EPA Headquarters, approves or disapproves deviation requests.

Direct Cost: Those costs that can be identified specifically with a particular cost objective and are so charged. (Also see "Indirect Costs.")

Eligible Costs: Those costs in which Federal participation is authorized by applicable statutes. (See "Allowable Costs.")

Facility (statutory definition): (A) Any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft; or (B) any site or area where a hazardous substance has been deposited, stored, disposed of, placed, or otherwise come to be located; [this] does not include any consumer product in consumer use or any vessel.

Feasibility Study (FS): A study undertaken by the lead agency (or responsible party if the responsible party will be developing a cleanup proposal) to develop and evaluate options for remedial action. The FS emphasizes data analysis and is generally performed concurrently and in an interactive fashion with the remedial investigation (RI). The FS process uses data gathered during the RI. The RI data are used to define the objectives of the response action and to develop and screen remedial action alternatives. Next, the FS involves a detailed analysis of a limited number of alternatives and documentation in a report.

Force Account Work: The use of the State's own employees or equipment for construction or construction-related activities (including architectural and engineering services, or for repair of, or improvement to, a facility).

Geotechnical Investigation: A study of the soils -- surface and subsurface -- found at a site. This involves sampling of the soils to determine characteristics such as plasticity, gradation, moisture content, load capacity, etc., as well as chemical analyses to evaluate the extent of contamination of the site with hazardous wastes.

Indirect Cost: Any costs that are incurred for common objectives and that cannot be charged directly to any single cost objective. These costs are allocated to the cost objectives benefited, based on a fair method of approximation. Indirect costs also are referred to as "overhead" or "burden costs."

Master List: EPA's central list containing the names of individuals and other entities ineligible to participate in EPA assistance programs because they are suspended, debarred, or under a voluntary exclusion.

Minority Business Enterprise (MBE): A minority business enterprise is a business that is: (a) certified as socially and economically disadvantaged by the Small Business Administration; (b) certified as a minority business enterprise by a State or Federal agency; or

(c) an independent business concern that is at least 51 percent owned and controlled by a minority group member(s).

National Contingency Plan (NCP): Officially known as the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300), this regulation outlines responsibilities and authorities for responding to releases into the environment of hazardous substances and other pollutants and contaminants under the statutory authority of CERCLA and section 311 of the Clean Water Act.

National Priorities List (NPL): A list of the highest priority releases or potential releases of hazardous substances, based upon State and EPA Regional submissions of candidate sites and the criteria and methodology contained in the Hazard Ranking System, for the purpose of allocating funds for remedial response. Published by EPA, the NPL is updated periodically.

Price Analysis: The process of evaluating a prospective price of a subagreement for goods or services without regard to the contractor's separate cost elements and proposed profit. The price analysis determines the reasonableness of the proposed subagreement price based on adequate price competition, previous experience with similar work, established catalog or market price, law, or regulation.

Procurement System Certification: The certification the State signs after it has reviewed its procurement system and compared that system to the minimum requirements of 40 CFR Part 33. The State either certifies that its procurement system meets EPA's minimum standards, or that the State's system does not meet the requirements in Part 33 and that the State will allow an EPA pre-award review of proposed procurement actions.

Profit: The net proceeds obtained by deducting all allowable costs (direct and indirect) from the price of a subagreement. (This definition may vary from many firms' definitions of profit because it is based on applicable Federal cost principles; it instead may correspond to those firms' definitions of "fee.")

Project: A group of remedial response activities at a site intended to study and/or remedy a verified or potential release of a hazardous substance that poses an actual or potential significant threat to human health, the environment, or real or personal property. Remedial projects usually involve groupings of one or more of the following activities: remedial investigation/feasibility study, remedial design, remedial action, and/or operation and maintenance.

Record of Decision (ROD): The ROD is a document developed for obtaining and officially recording the selection of a specific remedial alternative, and contains an explanation and justification for selection of the particular alternative.

Remedy or Remedial Action (RA): As defined by section 101(24) of CERCLA, means those actions consistent with permanent remedy taken instead of, or in addition to, removal action in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment. The term includes, but is not limited to, such actions as the location of the release as storage, confinement, perimeter protection using dikes, trenches, or ditches, clay cover, neutralization, cleanup of released hazardous substances and associated contaminated materials, recycling or reuse, diversion, destruction, segregation of reactive wastes, dredging or excavations, repair or replacement of leaking containers, collection of leachate and runoff, on-site treatment or incineration, provision of alternative water supplies, and any monitoring reasonably required to assure that such actions protect the public health and welfare and the environment. The term includes the costs of permanent relocation of residents and businesses and community facilities (including the cost of providing "alternative land of equivalent value" to an Indian tribe pursuant to CERCLA section 126(b)) where the President determines that, alone or in combination with other measures, such relocation is more cost-effective than and environmentally preferable to the transportation, storage, treatment, destruction, or secure disposition off-site of such hazardous substances, or may otherwise be necessary to protect the public health or welfare; the term includes off-site transport and off-site storage, treatment, destruction, or secure disposition of hazardous substances and associated contaminated materials. The term also includes enforcement activities related thereto.

Remedial Design (RD): The technical analysis and procedures that follow the selection of remedy for a site and result in a detailed set of plans and specifications for implementation of the remedial action.

Remedial Investigation (RI): A process undertaken by the lead agency (or responsible party if the responsible party will be developing a cleanup proposal) that emphasizes data collection and site characterization. The remedial investigation is generally performed concurrently and in an interdependent fashion with the feasibility study. A remedial investigation is undertaken to assess the nature and extent of the problem presented by the release. This includes sampling and monitoring, as necessary, and includes the gathering of sufficient information to determine the necessity for remedial action and to support the evaluation of remedial alternatives.

Remedial Planning: A phase in remedial response initiated at a site prior to implementing the remedial action. Remedial planning encompasses the activities of remedial investigation/feasibility study and remedial design. States are not required to share in costs of remedial planning at privately owned and operated sites; at publicly operated sites they must share in remedial planning costs only if and when a remedial action is undertaken.

Remedial Project Manager (RPM): The official designated by the lead agency to coordinate, monitor, or direct remedial or other response actions.

Remedial Response: A series of cleanup activities intended to provide permanent resolution of a release or potential release of a hazardous substance from a site. Remedial response generally includes the following sequence of activities: remedial investigation/feasibility study, remedial design, remedial action, and operation and maintenance.

SARA: The Superfund Amendments and Reauthorization Act of 1986 was enacted by Congress to reauthorize CERCLA.

Scope of Work: The element of a remedial planning agreement that generally outlines the activities, tasks, and subtasks to be undertaken at a site. The scope of work also provides general information on the objectives of the project.

Services: A contractor's labor, time, or efforts that do not involve the delivery of a specific end item, other than documents (e.g., reports, design drawings, specifications). This term does not include employee agreements or collective bargaining agreements.

Short List: The list of firms, selected by a State, who are judged to be qualified to perform services for a specific scope of work. The short-listed firms are selected based on an evaluation of statements of qualifications and experience received from interested firms in response to a solicitation for services issued by the State. Short-listed firms are allowed to continue participating in later phases of the procurement selection process.

Site Survey: A topographic study of a site. Depending on the location and circumstances, surveying required may be aerial, ground, or a combination of the two.

Small Business: A business as defined in section 3 of the Small Business Act, as amended (15 USC 632).

Statement of Work (SOW): The element of a remedial response agreement that specifies in detail the activities, tasks, subtasks, and objectives to be performed pursuant to that agreement. The SOW should contain salient points regarding the background of the release or potential release, problem definition, purpose of the work, and a description of the services to be performed either by the State or by an EPA contractor.

Subagreement: A written agreement between an EPA recipient and another party (other than another public agency) and any lower tier agreement for services, supplies, or construction necessary to complete the project. Subagreements include contracts and subcontracts for personal and professional services, agreements with consultants, and purchase orders.

Superfund Comprehensive Accomplishments Plan (SCAP): A document prepared by the EPA Regional office incorporating cost estimates for the response activities to be accomplished throughout a given fiscal year.

Suspension: An action taken by the Director, Grants Administration Division under 40 CFR 32.300 to temporarily disqualify an individual, organization, or unit of government from receiving any EPA assistance or subagreement.

Task: A discrete piece of work that addresses a single objective specified by a statement of work for planning, evaluating, or implemeting a response action: e.g., hydrogeological study, hazardous waste characterization, alternative analysis, construction of a fence, or installation of a leachate control system.

Voluntary Exclusion: A term of settlement, in lieu of a finding for debarment, under which a person or entity agrees to abstain voluntarily from participation in EPA-assisted projects.

Women's Business Enterprise (WBE): A business that is certified as such by a State or Federal agency, or that meets the following definition: A WBE is an independent business concern that is at least 51 percent owned by a woman or women who also control and operate it. Determination of whether a business is at least 51 percent owned by a woman or women shall be made without regard to community property laws. For example, an otherwise qualified WBE that is 51 percent owned by a married woman in a community property State will not be disqualified because her husband has a 50 percent interest in her share. Similarly, a business that is 51 percent owned by a married man and 49 percent owned by an unmarried woman will not become a qualified WBE by virtue of his wife's 50 percent interest in his share of the business (40 CFR 33.005 (b)).

Work Plan: The detailed listing of all activities and tasks to be conducted under a remedial response agreement. It should also include a schedule for completion of the work and show the outputs anticipated.

APPENDIX E

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* These guidance documents are currently being revised, or will be revised, to include new SARA provisions and will be issued by OSWER when completed.